

# House & Home

THE MARKETING AND MANAGEMENT PUBLICATION OF THE HOUSING INDUSTRY

JUNE 1968



**How to cash in on the golf-course boom**

# THE KID-CUSHIONED FLOOR T.M.

**(Helps you sell homes faster!)**

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What do we mean by Kid-Cushioned? Beautiful floors that can take a beating and not show it.

A new idea in vinyl floors that sells houses faster because it's a benefit buyers want.

Kid-Cushioned Floors aren't just plain, ordinary vinyl. But *proved* Congoleum-Nairn cushioned vinyl.

*Proved* because its extra vinyl cushions its beauty against the beating floors take from kids, "lookers" and home-buyers... *better than other floors.*

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Our vinyl is tougher & thicker.

### Spills? Dirt? Accidents?

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### "How about installation?"

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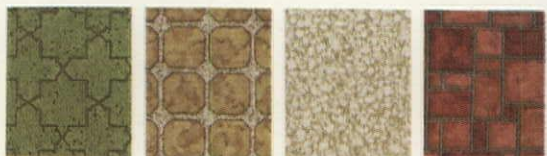
### "How about choice?"

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Yet Kid-Cushioned Floors never cost more and *usually much less* than their imitators.

### BUILDERS BEWARE:

There's only one KID-CUSHIONED FLOOR. It was invented & perfected by us: Congoleum-Nairn. For complete details see your floor covering contractor.

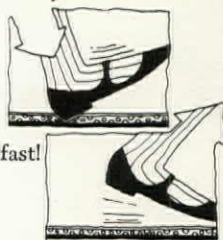


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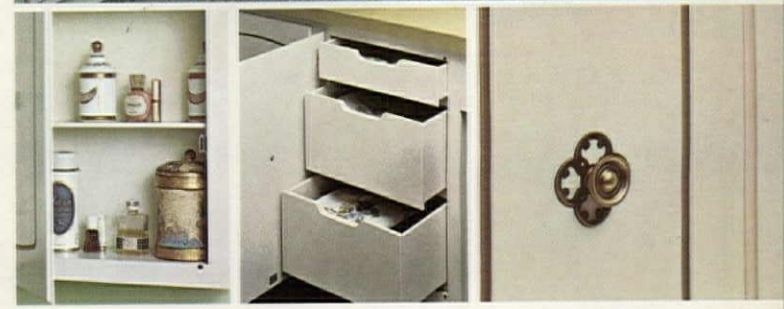
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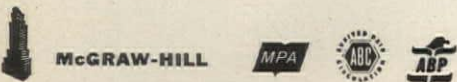
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# House & Home

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VOL. 33 NO. 6

JUNE 1968

**EDITORIALS**

**How to bring pension-fund money into housing** 61  
Everyone in the industry should support Congressman Hanna's bill that would let pension-fund master trusts qualify as Real Estate Investment Trusts

**The song of the cuckoo: industrialization vs. housing** 61  
It's easy to knock the housing industry for its backwardness compared to other industries. But the all-too-glib critics consistently ignore two basic truths

**FEATURES**

**How to cash in on the golf boom** 62  
Sales records show that even non-golfers like to buy near a good golf course. But unless it's handled right, a course can turn into a million-dollar mistake

**Can slum labor be used to rehabilitate the slums?** 76  
No, say the building-trade unions. But here's evidence to the contrary from a rehab specialist who turns unskilled slum dwellers into productive crews

**H&H Round Table report: coming changes in the housing market** 82  
Today's big swing to leisure-oriented living is big news to builders. It calls for new approaches to housing design, land use, marketing and management

**How industrialized housing will affect trade unions in the '70s** 90  
A first-of-its-kind study reports: For some trades, the negative effects of industrialization will be more than offset by a general increase in building

**How apartment builders and owners can foil intruders** 94  
You can calm tenants' fears by designing, equipping and managing your project for security. Result: Your units will rent faster and stay rented longer

**NEWS**

**Through the ceiling: the FHA interest rate leaps to 6¾%** 5  
Lenders cheer and builders are generally receptive as loan terms are fixed; mortgage discounts fall on the news, and outlook for used-home sales improves

**Fanny May's first big auction market—goof or grand success?** 5  
The private market insists the agency still buys mortgages at too high a price, but President Ray Lapin and his staff couldn't be happier about new operation

**A Titan falls: Bart Lytton writes own story for House & Home** 9  
"I could have compromised," says the former chairman of Lytton Financial, "but I'd have lost management control—I can't march in anyone else's parade"

**DEPARTMENTS**

<b>Housing-stock prices</b>	<b>18</b>	<b>New products</b>	<b>110</b>
<b>Mortgage-market quotations</b>	<b>6</b>	<b>New literature</b>	<b>126</b>
<b>Leaders</b>	<b>36</b>	<b>Reader service card</b>	<b>117</b>
<b>Letters</b>	<b>42</b>	<b>Advertising index</b>	<b>129</b>
<b>Technology</b>	<b>108</b>		

**Cover:** Golf course at Mission Viejo, Calif. Photo: Julius Shulman. *For story, see page 62.*

**NEXT MONTH**

What homebuilders should know before they tackle light-commercial construction . . . Curtain walls: more and better systems to choose from . . . Award-winning houses by custom builders . . . Annual report on housing's publicly owned companies . . . How NAHB's best local chapters get things done

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**FIRST AUCTION** finds FNMA chief Ray Lapin with agency's Frank Pence (left), Harry Gilbert (right) and their staff experts, all examining bids.

Frank Hoy



**SMALL TEAMS** studied bids. Crew includes secretary Helen Rogers, loan expert Lou Coyne.

## FHA mortgage ceiling raised to 6¾%; builders' discounts drop to 2-5 points

The government's move all the way up to 6¾% won an enthusiastic response from lenders and a grudging endorsement from building leaders.

The new interest ceiling on FHA-VA loans, up from 6%, dropped builder discounts from a level of 8-10 points to about 2-5 (table, p. 6). It was the sharpest increase ever made in the FHA rate.

"The government faced up to it," said Robert Morgan, who directs the Massachusetts Purchasing Group of 190 savings banks.

"The building industry is no longer the stepchild of the economy," said President Carton S. Stallard of Jersey Mortgage (Elizabeth).

The change came with startling suddenness once the President had signed legislation abolishing the old ceiling until next October. The move caught the Federal National Mortgage in the middle of its first auction (story below), and the agency had to reorient its market operation to the new rate.

**Warning of the 10% money.** President Johnson warned in signing the bill that mortgage interest rates could go to 10% if Congress failed to give him a 10% tax surcharge.

Housing Secretary Robert Weaver set the new FHA rate and defended it as necessary to prevent lenders and investors from deserting the FHA mortgage market for conventional loans yielding 7% or bonds returning up to 6¾%.

Mortgages insured by FHA had actually been selling at 90 cents on the \$1, with ¾% servicing, and yielding 6.98%. That compares with the yields on other instruments, but the price meant a discount of 10 points to the builder. For every \$1,000 "borrowed" on an FHA-VA mortgage, the lender actually advanced only \$900.

Such deep discounts discourage lenders.

They also choke off used-house sales, because a house owner must usually absorb the mortgage discount in order to sell his house. This, in effect, cuts the seller's price up to 10%, and he often decides to hold onto his home instead of selling. Commissioner Philip Brownstein said the new discounts should "fall within the area of tolerance," generally regarded as anything under 5 points.

With the ceiling increase, discounts dropped generally according to formula. A mortgage price rises and a discount declines about 2 points on a ¼% change in interest rate. The ¾% rate increase produced the predictable price rise and discount cut of 5-7 points.

**The usury states.** The 6¾% rate stirred temporary uncertainty among lenders in the money-center states that retain 6% usury laws—New York, New Jersey and Pennsylvania. But some lawyers insisted that FHA-VA loans were exempt from local usury ceilings and others argued that legislation would clear the way for the new rate anyway. HOUSE & HOME's mortgage-company correspondents in Newark and Philadelphia both quoted discounts on the 6¾% loan—2½-3½ points and 4 points respectively. New York lenders were hesitant, but sources at the big Williamsburgh Savings Bank in Brooklyn said FHA loans would probably be bought at 2 to 3 points—a point each to the buyer and seller and another to the broker if the deal was brokered. Almost no New York lenders would quote rates on conventional mortgages, which had been going at the usury limit of 6%, plus 3% or more in fees, before the FHA change.

In California, the Bank of America began bidding 97. The offer was with servicing released, so the effective bid was about 96. The remainder of the California market opened at about 95.

## Fanny May's mortgage auction comes on strong—in bids AND prices

Fanny May's auction market bowed in with an average price of 91.69 on a 90-day commitment for the 6% FHA loan—a good 1½ points above the private market.

But the agency's first offering of \$40 million in purchase money was oversubscribed threefold, and FNMA's President Ray Lapin hailed the initial session as an outstanding success.

The auction requires sellers to compete with each other, by bidding down their selling prices, for the purchase money offered each week by Fanny May.

Sellers in the first auction offered \$173 million worth of mortgages at acceptable bids averaging 91.69 for 90-day commitments, 91.90 for 180-days and 92.53 for one year—all on the 6% loan.

**Adjustment to 6¾%.** The government raised the FHA interest ceiling to 6¾% in mid-auction, and Lapin said all

accepted prices would be raised automatically by 6 points, or by the traditional 2 points per ¼% change in the interest rate (story above). That took the 90-day bids to 97.69, the 180-day to 97.90 and the one-year to 98.53.

The private market on 90-day commitments opened at about 95-98 on the new 6¾% loan.

Lapin said all subsequent auctions would be based on the 6¾% rate and that no offers on the old 6% basis would be honored.

**Critic and defenders.** Brokers and savings bankers in New York stated flatly that Fanny May goofed, and that its prices were still too far above the private market, at least in the first auction. And Fanny May's second auction, held a week later on the 6¾% loan, seemed to bear them out. Prices fell sharply—to 95.59 on 90-day

commitments, 96 for 180-day and 96.61 for one year.

But FNMA couldn't have been happier with its opening market. It had a new and lower price structure, and the smooth manner in which the FNMA staff handled the big switch in operations pleased everybody.

"It's going to be a lot better now than when there was a fixed rate," Lapin said. "Fanny May had been paying 93 for 6% loans and we know that that's just unrealistic.

"Under the auction market, the two markets (FNMA and the private market) should become more intertwined than before," he went on. And, sensing what the early reaction from the private market might be, he continued: "Sure, investors will try to go lower—no matter what the auction price is.

Story continued on p. 6

# Fanny May's first mortgage auction . . . continued

"But they aren't in as strong a bargaining position as before. I think our prices are definitely going to influence the private market. And I think investors are going to have to come around to the national market price."

**Job well done.** Before the first auction on May 6 there were a dozen dry runs held by agency officials.

The agency's chief loan officer, Frank "Hank" Pence, took charge of seeing that the auction ran without a hitch. "It all came off so smoothly," said President Lapin, "it was hard to believe the thing was really underway."

In room 917 of the Fanny May headquarters Pence's crew of 12 opened, sorted and rejected or accepted the 652 bids received. The entire operation was accomplished in about eight hours.

The agency was pleasantly surprised at how well the forms were completed. Of the \$173 million bids, only \$11 million were rejected for filing deficiencies.

**Instant pricing.** When it was over, an authoritative nationwide price was available for the first time on FHA and VA loans.

The agency accepted 187 bids and rejected 465. It took 120 of 350 bids for the 90-day commitments, and allocated \$19.7 million of \$81.6 million bid to that category. It accepted 59 of 260 offered in the 180-day sector and allocated \$18.3 million against \$80.6 million that was bid.

The lowest allocation came in the one-year commitment sector, where only 8 of 42 offers were accepted, and where a total allocation of \$2.4 million was made. Offers totaling \$11.2 million had been received.

President Lapin said he anticipated a low level of offers from the one-year commitment sector, and he attributed this to builder caution over the new program. "This percentage should increase in the next couple of months," he said, "and I would expect the 12-month commitments would amount to between 30% to 40% of total auction in time."

Discussing the initial auction, Lapin said he was "more confident than ever that this is going to work really well." He said his staff found no real problems the first day. The agency still must answer some minor questions—a policy decision on such items as a mortgage company's maximum allotment per week, for example.

"But how," he asked, "do you define a company?"

Big parent companies with several subsidiaries could monopolize the auction by letting each subsidiary bid the full \$500,000 permitted to a company. Lapin wants to prevent this.

Smaller companies could, conceivably, organize subsidiary companies for the purpose of grabbing more of the auction money. Lapin wishes to discourage this.

The first auction indicated that the theoretical price differential between the nation's regions may be just that—theory, according to Lapin.

"The bidding simply didn't bear out the argument for regional pricing," he said,

THE AUCTION AT A GLANCE				
(OPENED: 5/6/68) (DOLLARS IN THOUSANDS)				
COMMITMENT PERIOD—6% FHA-VA				
	90-DAY	180-DAY	ONE-YEAR	TOTAL
ACCEPTED OFFERS:	120	59	8	187
AVERAGE PRICE:	91.69	91.90	92.53	
AMOUNTS:	\$19,693	\$18,281	\$2,400	\$40,374
ALL OFFERS:	350	260	42	652
PRICE RANGE:	90.00/96.50	89.99/99.00	91.70/97.00	
AMOUNTS:	\$81,623	\$80,554	\$11,245	\$173,422
REGIONAL BREAKDOWN				
	90-DAY	180-DAY	ONE-YEAR	
<b>ATLANTA</b>				
TOTAL ACCEPTED	\$4,315	\$3,061	\$1,200	
PRICE	91.66	91.99	92.60	
<b>CHICAGO</b>				
TOTAL ACCEPTED	\$1,505	\$4,000	\$100	
PRICE	91.90	91.99	91.70	
<b>DALLAS</b>				
TOTAL ACCEPTED	\$5,980	\$6,500	\$100	
PRICE	91.67	91.73	92.90	
<b>LOS ANGELES</b>				
TOTAL ACCEPTED	\$5,868	\$2,720	\$1,000	
PRICE	91.55	91.99	92.62	
<b>PHILADELPHIA</b>				
TOTAL ACCEPTED	\$2,025	\$2,000	.....	
PRICE	91.81	92.07	.....	

adding that some Eastern mortgage companies bid as much as a point below large Western companies, just the reverse of what might be expected. "This seems to give the lie to the argument of geographical price difference," Lapin said.

The highest average price paid for 90-day commitments was in Chicago—91.90. The lowest was in the Los Angeles region, 91.55. Philadelphia reported an average of only 91.81; Atlanta, 91.66, and Dallas, 91.67—differences that are virtually meaningless.

For 180-day commitments the highest

average for any region came in Philadelphia—92.07. The lowest was in Dallas, where the figure was 91.73. Atlanta, Chicago, and Los Angeles all reported 91.99.

A larger spread is found in the one-year commitment category, where the high price average reached 92.90 in the Dallas area and the low hit 91.70 in Chicago. Atlanta reported 92.50 and Los Angeles 92.62. No one-year bids from the Philadelphia area were accepted. Fanny May said allocations to each FNMA region were in direct proportion to bids received.

—ANDY MANDALA

## HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending May 17.

FNMA Auction Prices May 20 6 3/4%	City	FHA Sec. 203b— Discount paid by builder Min.-Down* 30-year immed. w Private mkt. 6 3/4%	FHA 221d3&4 Apts., Discount 6%	Conventional Loan Rates			Construction Loan Rates Interest+fees All lenders
				Comm. banks, Ins. Cos. 75%	Savings banks, S&Ls 80%	Savings banks, S&Ls Over 80%	
90-day commitment Average 94.76 Accepted bid range 94.26-95.16	Atlanta	4-5	a	7 1/4	7-7 1/2	7 1/2-7 3/4	7 1/2+2
	Boston	2	5-6	6 3/4-7 1/4	7 1/4-7 1/2	a	7-7 1/4+1
	Chicago	4	7 1/2	6 3/4	6 3/4-7	7	8
	Cleveland	4-5	a	6 3/4-7	6 3/4-7	7+1-2	7 1/2+1-2
	Dallas	5-6	a	7 1/2	7 1/2	7 3/4	8+1
	Denver	4-5	a	7	7-7 1/4	7 1/4-7 1/2	7 1/2+1-1 1/2
	Detroit	3-3 1/2	7	7	7	7+1-2	7 1/2+1-2
	Honolulu	4-5	a	7 1/4-7 1/2	7 1/2-7 3/4	a	7 1/2-7 3/4+1 1/2-3
	Houston	4 1/2-5	a	7-7 1/4	7 1/4	7 1/4-7 1/2	7+2
	Los Angeles	5	a	7 1/4-7 1/2	7 1/4	7 1/2	7 1/2+1 1/2
180-day commitment 95.23 Accepted bid range 94.47-95.60	Miami	4-5	a	7 1/4	7	7-7 1/4	7 1/4-7 1/2+1-2
	Minn.-St. Paul	2-5	a	6 3/4-7 1/2	6 3/4-7 1/4	7 1/4	7 1/2+1-1 1/2
	Newark	2 1/2-3 1/2	b	5	6+3-4	b	7 1/2+2
	New York	2-3	a	a	a	a	7+3
	Okla. City	3	a	b	7+1	7 1/4-3	7-7 1/2+1-2
	Philadelphia	4	a	6 1/2-7	7	7+2	7 1/2+1
One-year commitment 96.02 Accepted bid range 95.50-96.35	San Francisco	4 1/2-5	a	7 1/4	7 1/2-7 3/4	7 3/4+	7-7 1/2+2
	St. Louis	3 1/2-4 1/2	a	6 3/4-7	7-7 1/4	7-7 1/2+1-2	7 1/4-7 1/2+1-2
	Seattle	4-4 1/2	a	7 1/4	7 1/4-7 3/4	7 1/2-7 3/4	7 1/4-7 1/2+1 1/2-2
	Wash., D. C.	4 1/2	a	7-7 1/4	6 3/4-7 1/2	7 1/4-7 1/2	6 3/4-7+2

\* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve months.  
 • Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.  
 • Quotations refer to houses of typical average local quality.  
 • 3% down on first \$15,000; 10% of next \$5,000; 20% of balance.

Footnotes: a—no activity. b—limited activity. c—Net yield to investor of 6% mortgage plus extra fees. w—for comparable VA loans also. x—FNMA pays 1/2 point more for loans with 10% y—discounts quoted are net after seller pays 1/2% marketing fee and 1/2% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in \$130 units, of which \$30 is contribution to FNMA capital and \$100 is for a share trading at about \$70.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5¢ Savings Bank; Chicago, Robert H. Pease, pres., Draper & Kramer Inc., and Robert H. Wilson,

pres., Percy Wilson Mortgage & Finance Corp.; Cleveland, David E. O'Neill, vice pres., Jay F. Zook, Inc.; Dallas, M. J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Clair A. Bacon, pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, pres., T. J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Minneapolis-St. Paul, Walter C. Nelson, pres., Eberhardt Co.; Newark, William W. Curran, vice pres., Franklin Capital Corp.; New York, John Halperin, J. Halperin & Co.; Oklahoma City, B. B. Bass, pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co., and Robert Kardon, pres., Kardon Investment Co.; St. Louis, Charles A. Keller, vice pres., Mercantile Mortgage Co.; San Francisco, John Jensen, Sr., vice pres., Bankers Mortgage Co. of California; Seattle, Kirby D. Walker, vice pres., Continental, Inc.; Washington, James C. Latta, sr. vice pres., Associated Mortgage Cos. Inc.



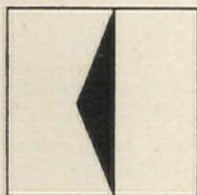
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## OPINION

## The Weaver resignation—a farewell without tears

Homebuilders will best remember the first housing secretary for what he didn't do.

And Robert C. Weaver himself, after eight long years as Washington's top housing man (first at HHFA, then with HUD), appears to savor his return to academia. He will become president of Bernard



WEAVER

M. Baruch College in Brooklyn, N.Y., in January.

The first Negro Cabinet member leaves the nation's housing department much as he found it—a vast potential hamstrung by too many bureaucrats

who know too little about the housing industry.

From HUD's beginning in 1966, Weaver operated under a severe handicap: He never had the Presidential ear. Indeed, he managed to get the job only after the President had tried to give it away to several other choices.

In office, Weaver sought to do what he thought the President wanted. So he sat passive while the Administration choked homebuilding with tight credit in 1966.

And in 1967 the loyal Weaver became more of an apologist for old ideas than an architect of new designs. The original thinking came instead from the President's political foes—Senators Charles H. Percy (R., Ill.) and Robert F. Kennedy (D.,

N.Y.). Weaver denounced Percy's home-ownership plan as a "cruel hoax" and Kennedy's tax incentives as "a step backward." But before Weaver could catch his breath, the President embraced both plans with only minute changes.

When Weaver did innovate, he often seemed more concerned with HUD's public image than with the public good. For example, HUD's over-promoted experiment in instant rehab is an apparent failure. (NEWS, May).

For several years the Harvard-educated theorist has seemed out of step. The twin crises of urban decay and nationwide poverty underscored a desperate need for low-cost housing. The changing times cried out for a doer—and Weaver was a thinker.

## Amid perils and pressures, the housing bill inches forward

The President's plan to boost housing for low and moderate-income families—via massive subsidies on mortgages—is facing some stiff tests in Congress.

In its first trip through a sympathetic Senate housing subcommittee, the legislation fell on hard times. The panel cut \$2.3 billion from the original request for funding.

What is left is still substantial—\$5.2 billion over a three-year period—although it is a safe assumption the legislation will be trimmed even further before it reaches the President's desk. The House Appropriations Committee has already voted to fund the Model Cities and Rent Supplement programs in 1969 at levels below those asked by President Johnson.

**The money.** The appropriations panel voted \$500 million for Model Cities—\$188 million more than last year, but \$500 million less than the President had asked. Of the \$500 million for the program, the committee said \$200 million should go to the 70 cities already approved, and another \$200 million should be held for additional cities to be named shortly. The remaining \$100 million was earmarked for urban renewal projects within Model City areas.

For Rent Supplements, the committee voted \$25 million in new contract authority. This is also considerably higher than the sum voted last year, \$10 million, but is substantially below the \$65 million sought by the President. The committee also approved \$350 million for public housing projects, a sum \$75 million higher than okayed last year, but slightly less than the amount asked by President Johnson.

**The omnibus bill.** The 1968 legislation has been stalled in the House but has made some headway in the Senate. While indications are that many of the proposals will become law this year, funding must

still remain open to serious question.

The Senate version, as approved by the housing subcommittee, contains many of the original provisions sought by the Administration, including the dramatic low-income home ownership and rental interest subsidy programs.

These provisions, section 235 and 236 of the legislation, provide for federal subsidies for all but 1% of the payments on FHA home loans and rental-unit mortgages made at market rates. For the home ownership program, section 235, the panel set a mortgage limit of \$15,000, and \$17,500 in high-cost areas. It also accepted the Administration's request to allow a limit from \$17,500 to \$20,000 for families of five or more.

The income limit is 70% of that for the existing 221d3 program, and the committee further approved a \$300 income deduction for each minor child. A maximum 20% of family income would be paid toward the mortgage.

For the rental program, section 236, tenants would be required to pay 25% of family income, with the income limits set on the same basis as in section 235. The committee authorized \$600 million for the two programs, to be spread over three years—with each of the programs receiving \$75 million in fiscal 1969; \$100 million in fiscal 1970; and \$125 million in the 1971 fiscal year.

The committee also approved the HUD plan to guarantee the obligations of new-town developers, and authorized grants for water and sewer facilities.

**Plans for '70.** The Model Cities program would receive \$1 billion in supplemental grants for participating cities in 1970, if the committee's authorization is approved in appropriations. The panel further recommended another \$12 million for Model Cities planning.

Funds for urban renewal would be increased by \$1.4 billion in the coming fiscal year under the subcommittee bill, and an additional \$350 million would go for the model cities program on the bill's enactment.

The subcommittee also approved an increase of \$40 million in Rent Supplement authority for fiscal 1970, with \$100 million for each of the next two years.

**Fanny May.** One controversial section of the bill that squeaked by the subcommittee, over the muted objections of the National Association of Home Builders, is the proposed spin-off of the Federal National Mortgage Association's secondary market operations.

The panel approved the split which, in effect, leaves Fanny May's secondary market outside federal budget constraints. Administration officials pressed hard for this since, under the new "unified" budget, the agency's mortgage purchases would appear in the budget deficit column. With the Federal Budget facing a deep deficit, the prospects for FNMA remaining in the market under the old system were slim.

The subcommittee also approved the proposed Government National Mortgage Association (Ginny May) to handle special assistance and management and liquidation functions. The new GNMA also would be empowered to guarantee participations issued by FNMA or other private issuers, if the participations were backed by pools of FHA-VA or Farmers Home loans. The panel also approved a new program of FHA insurance of seasonal homes, with limits up to \$15,000, and loan to value ratios of 75%. This provision was sought by the Mortgage Bankers Association. The MBA would have liked to see an increase in the maximum loan amounts for FHA mortgages, and an amendment on the top FHA loan limit is still a possibility. —A.M.



**BART LYTTON** announces resignation to press (left and middle) after 27-hour session with creditors and S&L authorities. Lytton said, "I wrote my own

exit music—with grace." End photo shows Lytton, a prominent Democrat, and his wife greeting India's ambassador at reception in their home.

## Bart Lytton's own story: 'Neither borrower nor lender be'

*Bart Lytton, who brought zest to a drab world of savings and loans, resigned as chief of his \$700-million empire April 25, under pressure from creditors due \$2.8 million. Veteran S&L executive Charles Wellman is now running Lytton Financial Corp.*

My own decision to resign followed many months of acting—not as a conduit for savings into the real estate market—but as a man who had to take hat in hand in an effort to find new sources of funding.

I didn't like that role.

**Lytton's options.** There were several options open to me. I could have sold one of my two subsidiary savings and loan associations (Lytton South or Lytton North) and liquidated our debt.

I could have placed the holding company, Lytton Financial Corp., in bankruptcy. That would have harmed our creditors, shareholders and employees, while not directly injuring the associations' depositors. But I couldn't have done it without creating headlines that would have panicked our depositors and done irreparable harm to the savings and loan industry and almost certainly to all financial intermediaries.

You could chalk that up to one disadvantage of being somewhat newsworthy.

Or I could have worked out another compromise with the creditors [United Auto Workers and a group including Investors Diversified Services, a mutual fund] permitting me to remain as board chairman—a role some of them urged upon me. But I wouldn't have had management control, and as one major newspaper pointed out, I can't march as well in someone else's parade.

**Accomplishments and errors.** We at Lytton Financial dramatized the differences between commercial banking and savings associations. We helped show the industry that it could be human, have fun and still make a valuable contribution to human progress while earning millions. And we helped change the image of a backstreet shop housed in a dark office to a vital and architecturally exciting building on the main street of finance.

Of course we made mistakes. We made

loans that I find hard to believe ever passed through our shop. Why?

When Archibald MacLeish was nominated to be librarian of Congress, a committee considering his nomination read him some rather wild poetry he had written years before. When asked what it meant, MacLeish replied:

"Gentlemen, when I wrote that piece I knew what it meant and God knew. But now only God knows."

The loans I would have liked to reconsider, however, are not that significant when considered by industry standards or in the total posture of Lytton Savings. Even though the holding company couldn't, for the moment, meet its credit obligations, the subsidiary associations were judged sound and safe by the California state savings and loan commissioner.

**What happened?** First, let me say that the personal motivation for continuing the battle for control of the companies bearing my name was diminished by the changes forced on all of us during the period of tight money.

It just wasn't as much joy.

The problems faced by Lytton Financial Corp. were the direct result of borrowing money through the holding company. When the associations failed to show earnings in the past [three] years—unlike the remark-

able, unmatched record prior to that period, we had no internal means of servicing the holding company's loans or of repaying the debts as scheduled.

[Although the holding company has advanced cash into the subsidiary S&Ls in the past, authorities did not permit Lytton to pay off holding company debts with S&L profit.]

**Two routes.** A savings and loan association can be an exciting instrument in an economy geared to expanding construction, or it can become a static depository of savings, parsimoniously invested in the most conservative real estate loans.

The decision on which route to follow sometimes is not an option left to the association's management. Quite obviously, the extended period of tight money has dictated enormous changes in the very character of the savings and loan industry.

It isn't a business climate I found exciting. Had I wanted the security of a cautious financial institution I would have returned to my home town of New Castle, Pa., and become president of the First or Last National Bank.

But those years when Lytton Financial and its subsidiary associations were growing from \$1.4 million to \$700 million in assets were the most rewarding and meaningful of my life. I am proud that there are homes and buildings in the communities we serve that have been both profitable investments and socially beneficial.

**A look back.** My post has been rewarding and satisfying. It has given me an opportunity to participate in a wide range of activities from the arts, to government, to civic projects and private philanthropies I felt merited support, to a fascinating world of finance.

May I add that I consider homebuilding the most important force in our society. Not only does construction provide more jobs than any other industry, but home ownership also is the most stabilizing social force we have.

I have come to the end of one period of my life. And I am eagerly awaiting the exciting possibilities of the future. Whatever I do, I intend to continue working for a world of opportunity and a world at peace.

—BART LYTTON

NEWS continued on p. 12

### Of colorful tycoons—and editors

Financial Editor Ned Rochon, touring California in 1965, spent a memorable evening with Bart Lytton. One thing in particular that Bart said stayed with him: "I'm a tycoon, but I'm getting weary. I need a tycoon's challenge."

On news of Bart's resignation, Ned wired, offering a modest \$200 for a tycoon's own story. The wire produced the reply below and the story above.

*Dick O'Neil*

LOS ANGELES CALIF APR 30

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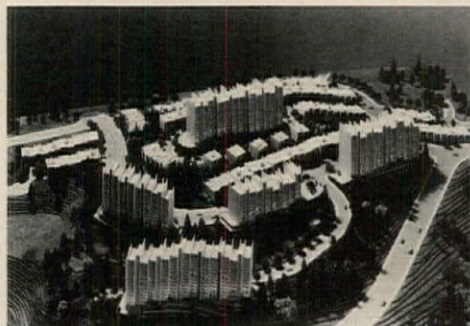
## General Electric gives up on San Francisco's Red Rock Hill

The \$33 million project overlooking the City by the Bay suffered a critical setback when FHA refused what the company deemed sufficient mortgage insurance. Result: GE is looking for another developer to take over.

Meanwhile, GE will continue to manage the 104 townhouse units already completed (plans had called for 700 units).

**Not enough.** GE's problem arose when the company sought an insurance commitment for 330 units at Red Rock Hill in the Diamond Heights redevelopment area. The San Francisco Redevelopment Agency, sponsor of the Diamond Heights project, estimated construction costs at \$14 million. So a 90% loan would have been \$12.6 million. But FHA would insure no more than \$7.3 million because it did not believe that, in that market, GE could charge high enough rents to support the higher mortgage.

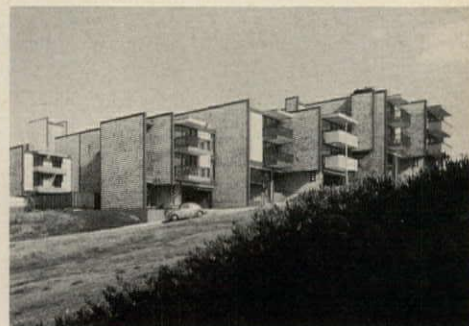
General Manager John Hippen of Red Rock Hill says, "It's difficult to find exact comparables in a site with unproven rental



**WHAT WAS TO BE**—a \$33 million Red Rock project of 1,000 apartments and townhouses.

history. The finance people, in essence, are being asked to buy a concept."

GE took over Red Rock in 1965 after San Francisco Redevelopers, a partnership between Southern California businessmen Irvin Kahn and Norman Smith, lost \$1.5 million in building and operating the townhouses. Some officials at GE hoped to utilize the project as a showcase for its products.



**WHAT IS**—after five years and two developers, 104 condominium townhouses have been built.

**The No-Show case.** "The showcase idea was not apparently a very good marketing concept at the time," says Deputy Executive Director E. Glenn Isaacson of the redevelopment agency. "But, I expect, a new developer with different objectives might be more successful."

—JENNESS KEENE  
McGraw-Hill World News, San Francisco

## Court tells towns: You can OK planned-unit developments

No special state laws are needed. Municipalities already have the power to zone for planned-unit developments under standard state zoning laws.

So ruled the Pennsylvania Supreme Court last month in permitting development of a second-house project with commercial facilities in the tiny resort town of New Hope (pop. 956).

The decision is likely to provide a guide for rulings in other states' courts. It opens the way for a major shift away from the lot-by-lot zoning that has kept American subdivisions in look-alike straitjackets for half a century (NEWS, Aug. '67).

The ruling negates virtually all legal arguments against zoning land for its best overall use. The only criteria: Does the zoning foster "... the health, safety, morals and general welfare" of the town and its citizens?

In its decision, the tribunal endorsed

both cluster zoning and the mixture of residential and commercial uses to create "a miniature residential community."

Instead of following rigid formulas that set minimum distances between houses, local officials can permit clustered houses under density zoning, which specifies only an average number of houses per acre.

And instead of permitting only one type of housing (such as single-family detached) on a tract, officials can mix commercial zones with all types of residential zones.

The New Hope project, called Village II, will have 1,000 townhouse units, a hotel, restaurant and extensive recreation facilities, including a golf course.

**From state to state.** The ruling, though it is binding only in Pennsylvania, seems to open the door to planned-unit developments throughout the nation.

"Every state," says planner Stephen Sussna of Trenton, N.J., "has about the

same basic zoning laws, so other state courts could duplicate Pennsylvania's decision."

**Three-year contest.** The decision comes after three years of disputes.

In 1964 builder Gerald C. Finn of Cranbury, N.J. proposed Village II for a 126-acre site zoned for single-family houses in New Hope. In June of 1965 town officials rezoned Finn's site for the planned-unit development.

New Hope residents who work in town were generally in favor, but its commuters were opposed. They fought the zoning ordinance in public meetings but lost, so they sued in Bucks County Court of Common Pleas and won.

Finn, who had answered the suit for the town (annual budget: \$30,000), appealed directly to the State Supreme Court. His case was argued by Philadelphia attorney Lenard L. Wolffe.

## Unions in two key areas snub President's wage plea

In Detroit building tradesmen went on strike after an employers' committee turned down their demands for wage increases ranging from 22% to 59%.

And in Los Angeles, carpenters finally settled for a 10% increase.

This was their response to a Presidential panel which two days earlier urged them to hold wage demands below the construction industry's 1967 average of 5.5%.

The President's committee on price stability expressed "strong concern that construction wage increases negotiated prior to the 1968 peak building season could imperil efforts to regain price stability."

The panel also said that the Detroit

strike, which idled 50,000 workmen, could prompt "a very large escalation" in other unions' wage demands.

In Detroit one contractor said: "If the unions got what they wanted, the cost of

building an average 2,200-sq.-ft. house would go up \$2,200."

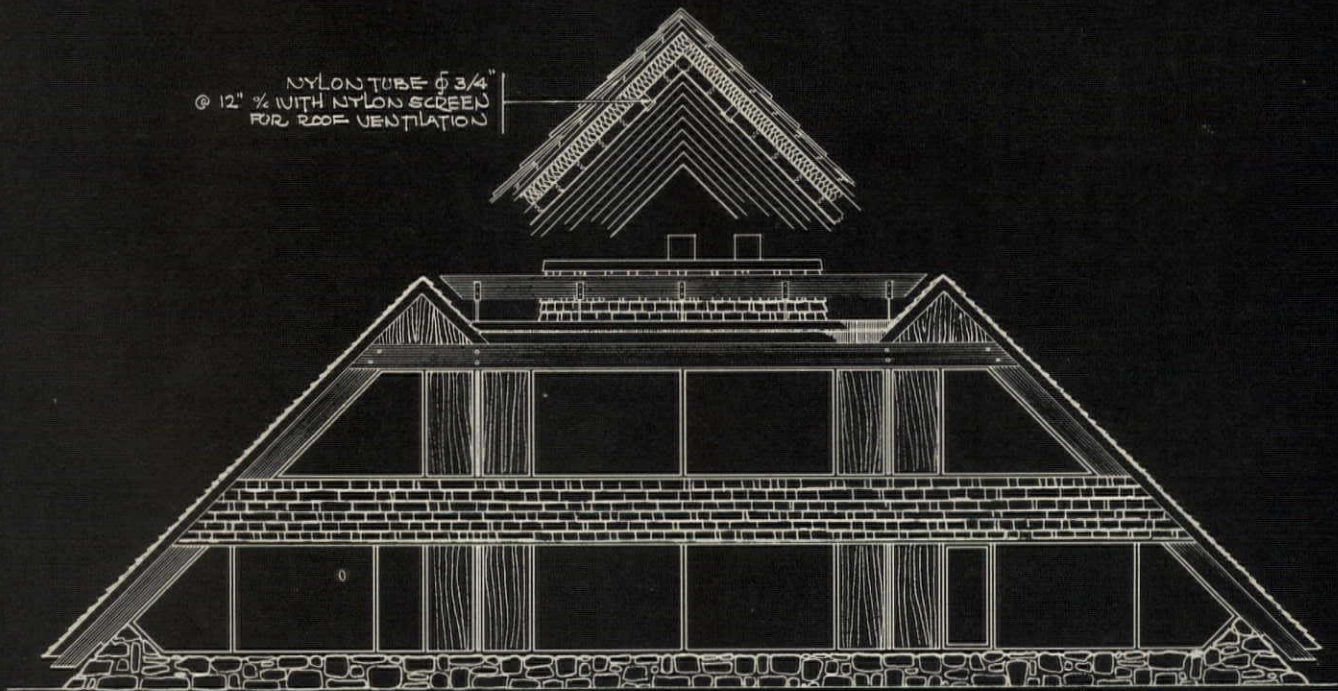
In addition to their raise, Southern California's 55,000 carpenters won an uphill battle for a five-year contract. This pact also sets a pattern for 5,000 cement masons.

The Southern California construction teamsters are also negotiating for a wage-benefit package. The 4,500 workmen want contract language to protect them against employers who let craftsmen drive.

Southern California need not worry about the other three basic trades this year. The operating engineers', ironworkers' and laborers' contracts expire in 1969, 1970 and 1971, respectively.

### WHAT DETROIT UNIONS WANT

Trade	Present Wage	Increase	% Increase
Bricklayer	\$6.35	\$2.67 an hr.	42%
Carpenter	5.97	2.10 an hr.	35%
Cement Mason	5.63	2.53 an hr.	45%
Electrician	6.42	3.80 an hr.	59%
Laborer	4.78	1.03 an hr.	22%
Lather	5.70	2.18 an hr.	38%
Plasterer	5.76	1.65 an hr.	29%
Reinf. Steel	6.26	2.47 an hr.	40%



**There's more than just a beautiful roof between this home and the weather.**

*Residence: Montreal, Quebec. Architects: D'Astous and Pothier. Certi-Split, handsplit shakes, 24" x 3/4" to 1-1/4" with 8" exposure.*



When the winter wind starts whistling along the St. Lawrence River, a home needs all the protection it can get.

To provide it, architects D'Astous and Pothier designed this waterfront home like an extension of the slope on which it stands—long and low with a deep slanted roof to deflect the wind and offer as little unprotected area as possible.

For additional warmth the roof was insulated and held away from the home

on 5½" x 13" laminated beams, like a shell, thus creating fields of warm air between it and the walls.

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## New made-in-Japan steel house is a success—in Japan

Tokyo's N.K. Prefab Co. has done what no packaged steel-house prefabricator has been able to do in the U.S.—make a profit.

The Japanese manufacturer has sold more than 3,000 steel prefabs since 1963. This almost equals the total output of all major U.S. steel-house prefabricators since 1948, none of which profited in the long run from packaged steel houses.

In spite of N.K. Prefab's success, President Ichiro Morioka has no immediate plans to export to the U.S. He sees too many obstacles:

"By the time we add packing, freight and tariff costs the houses are no longer competitive. And we're told that we might face opposition from American labor."

Morioka looks for a far more promising market in postwar Vietnam. Steel prefabs would serve a nation attempting to rebuild.

**Japan's success.** Morioka says steel housing's success in Japan and failure in the U.S. are not strictly comparable.

"In Japan steel is actually cheaper than wood because of the depletion of our domestic timber resources. This is not the case in the U.S." (NEWS, Apr.).

A typical 870-sq.-ft. prefab steel house in Japan, he says, costs \$7,223, exclusive of land. A comparable wood house costs \$8,333.

With this price advantage N.K., a sub-



**JAPANESE HOUSE** in Tokyo, made of steel, sells there for \$14,500. Cheaper model is \$7,500.

siary of Nippon Kokan K.K., one of Japan's big six steel producers, posted a profit for the first time last year on the sale of 900 houses.

This year N.K. is manufacturing 100 units a month. In two years the company foresees production of 500 to 1,000 units a month, a sizable addition to Japan's current one-million-homes-a-year market.

Construction costs range from \$8.60 a



**LUSTRON HOUSE** in Columbus, Ohio, made of steel and porcelain, sold for \$9,500 in 1947.

sq. ft. for a basic one-story model to \$10.20 a sq. ft. for a deluxe two-story version.

A crew of five can assemble the steel shell in two days but the interior requires from 45 to 60 days to complete.

**U.S. failures.** American manufacturers tried for more than 20 years to market prefab steel-houses. The best known and most prolific steel prefabricator, Lustron Inc. of Columbus, Ohio, went under in 1948 after manufacturing 2,000 houses (NEWS, Sept. '60). The Lustron house, however, was well designed and many still dot the Ohio landscape (photo, left). Alside Inc., Akron, Ohio, a manufacturer of an aluminum and steel house, folded after making 200 sales and losing \$8 million in one year. (NEWS, Sept. '64).

Other innovators of steel-house packages included U.S. Steel Homes of Pittsburgh, which subsequently shifted to the more lucrative production of components for steel construction systems. Prototypes created by Rohr Homes in Fullerton, Calif. (NEWS, Dec '64), Rheem Manufacturing in Los Angeles (NEWS, Nov. '63) and Armco Steel Corp. in Middletown, Ohio (NEWS, Feb. '63) in a joint venture with Techbuilt Homes of Cambridge, Mass., all proved to be exercises in futility.

—MARVIN PETAL  
McGraw-Hill World News, Tokyo

## The land rush: Two giants move in—and two spread out

Moving in are U.S. Steel and Weyerhaeuser; spreading out are Boise and Humble Oil & Refining.

Big Steel is joint-venturing a Los Angeles area project with builder Kaufman & Broad. Weyerhaeuser is investing an initial \$1 million in a planned-unit development near San Francisco. Boise has bought two 6,000-acre tracts for resort communities in California and Nevada. And Humble is buying into a 50,000-acre project in Houston.

Generally, the four industrial giants are putting their money into growth areas with an apparent need for new communities. The details:

**U.S. Steel.** The company is investing in a 907-acre subdivision already partly developed 25 miles northeast of Los Angeles. U.S. Steel will put up half of the money.

Kaufman & Broad (sales of \$44.6 million in fiscal 1967), began the project, Pine-

### Nary an NAHB delegate says nay to nation's open housing

Unanimously, and without one word of debate, a policy of open housing was "re-affirmed" by 440 delegates at the spring meeting of the National Association of Homebuilders, the industry's dominant trade group.

The vote in Washington, D.C., was further evidence of continuing political re-orientation at NAHB, which only two years ago CBS-TV described as "one of the most conservative groups found anywhere."

tree, with \$6 million in 1966. The company has sold 400 houses, and plans call for construction of 2,000 in the next 2½ years.

**Weyerhaeuser.** With builder Brown & Kauffmann of Palo Alto, Calif., the lumber company will develop 106 acres in Los Gatos, Calif., as a residential community called Rinconada Hills. The \$18 million project will include 530 dwellings.

**Boise Cascade.** The company has just invested \$4 million in its two largest land acquisitions.

It bought 6,090 acres of the 87,500-acre Rancho California from Kaiser Industries and Macco Realty, a subsidiary of the Pennsylvania-New York Central Transportation Co. Boise's land subsidiary, Pacific Cascade Land Co., will offer the first 1,000 acres of the anticipated 4,500 homesites for sale this summer.

Boise also picked up 6,000 acres near Las Vegas, Nev., for \$1.7 million. The land is part of a \$320 million residential resort to be built around a man-made lake 13 miles from the city. Participants in the community include Gulf Oil of Pittsburgh, Utah Construction & Mining and J. Barth & Co., both of San Francisco.

**Humble.** The new-town developer has bought a half interest in 50,000 wooded acres north-east of Houston. Humble paid King Ranch Inc. an estimated \$8 million.

Humble's housing reputation is based on Clear Lake City, a new town that got off to a slow start in 1962 near Houston (see H&H, *Clear Lake City: a mixture of*

*sprawl and builder problems*, June '66).

The new land, 20 miles from Clear Lake City, is being considered for a second new town. President John Turner of Friendswood, a land development subsidiary of Humble, explains:

"As a result of a Bayport industrial development, begun in 1964, the Clear Lake City project has turned right around. We have almost 7,000 residents now, and we will sell about 750 homes this year."

### Real estate company buys fourth largest prefabricator

Presidential Realty, a real estate investment and building company in White Plains, N.Y., has just bought Presidential Homes, a house and apartment prefabricator in Pemberton, N.J.

The price, \$1,500,000, is payable in cash and Presidential Realty common, which closed at 15¼ (ASE) the day after acquisition.

Presidential Realty owns and operates income property in 10 states and Puerto Rico. It develops and builds most of its own properties.

Presidential Homes earned \$154,000 on \$2.8 million in the year ended July 31, 1967. "But since July, our earnings have jumped 25% to 30%," says President Richard Duffield.

Presidential Realty earned \$1.4 million, or 88 cents a share, on gross of \$9.1 million in 1967. NEWS continued on p. 18



# Who would know more about door locks than our Mr. Bolt?

**M**r. Bolt, of course, is Roy C. Bolt, AHC. The AHC means that he is an Architectural Hardware Consultant as well as President and General Manager of the Kwikset Division-Emhart Corporation. He knows a lot about locks. He should after more than 40 years of working with them.

At Kwikset we have over 650 other people who know about locks and how to manufacture them so that they should never have to be repaired or replaced. If by some chance this should happen, they're fully guaranteed.

### **30 lock salesmen good and true.**

Kwikset also has 30 sales representatives who cover the U.S. for Kwikset. They're really not salesmen in the you-gotta-know-the-territory sense. They are men who sell effectively because of their knowledge of the products they represent.

They're specialists in showing dealers how to sell more locksets more profitably, specialists in advising builders on how to save time and money when buying and installing locksets.

### **Modern machine accounting speeds order processing.**

The use of computers has made it possible for Kwikset to process incoming orders with lightning speed and efficiency. And with the hundreds of thousands of locksets that Kwikset stocks in its huge warehouses, speedy shipment of orders can be made in record time. This makes it possible for our salesmen to devote



more time to their most important job: giving real honest-to-gosh service to each and every one of their customers.

### **Pot metal is ancient history.**

You'll note that our official name is Kwikset Sales and Service Company. The *service* part is one of the two things that set us apart from everybody else in the lock business.

The other is value — the best value in locksets. In the last 20 years we have made over 300 improvements and refinements in the technology and engineering of our locksets. To say nothing of creating some rather beautiful new designs and finishes.

We have come a long, long way since the pot-metal days of the early 1940s, even though some of our competitors still use that ancient history to sell against us.

Which brings up something else about our 30 good men. The product they have to sell is good enough that they don't have to knock the competition. Nor do they have to use a lot of razzle-dazzle salesmanship. They deal strictly in facts and they know just about everything there is to know about locks.

Maybe not quite as much as Roy Bolt, but they're working on it.

**kwikset**  **locksets**

**America's Largest Selling Residential Locksets**

Kwikset Sales and Service Company Anaheim, California  
A Subsidiary of Emhart Corporation



# The all new KitchenAid dishwasher. For builders who believe in old-fashioned quality.

If you're the kind of builder who's built a reputation for doing quality work, doesn't it make sense to use the quality dishwasher, KitchenAid?

The brand-new KitchenAid dishwasher has many strong new selling features as well as good, old-fashioned quality.

Smart, new styling. New washing cycles. New flexibility that makes loading a breeze. A great new wash/rinse system.

We've always believed in quality. And many builders have found our reputation for quality can help them. When you install a KitchenAid dishwasher, it's bound to reflect on the quality of the whole house.

With KitchenAid quality, you and your customers don't have to worry about callbacks.

So if you're the kind of builder who believes in old-fashioned quality, see your distributor for all the facts on the new KitchenAid dishwashers. Or send the coupon.

**We don't think quality is old-fashioned.**

KitchenAid Dishwashers, Dept. 8DS-6, The Hobart Manufacturing Co., Troy, Ohio 45373.			
Send me facts on the all new KitchenAid dishwasher.			
Name _____			
Address _____			
City _____		State _____	Zip _____
<b>KitchenAid</b> Dishwashers and Disposers			
By the makers of Hobart commercial dishwashers and food waste disposers.			

Plan now to include the new KitchenAid dishwashers and disposers in your Parade of Homes models.

# FHA dangles its mortgage bait at the mobile-home industry

The Federal Housing Administration is fishing for low-price housing, and some mobile-home companies are biting.

The agency is pulling in mobile-home makers almost by default. No one else, including the homebuilders, has come close to FHA's target—a house priced at \$5,000 with land.

The biggest catch so far is Guerdon Industries ('67 sales: \$80 million), which this month will deliver 90 factory-built houses with 25-year FHA mortgage insurance to an Ashburn, Ga., development. Average price: \$6,000 for a three-bedroom model with land (photo, above).

And Guerdon of Southfield, Mich., plans to produce the units for at least four more locations this year.

Three other mobile-home giants—Skyline Homes, DMH and Redman—are also trying to develop beefed-up units that satisfy a special set of FHA specifications.

**Only experiments.** The FHA is offering the mortgage insurance under its experimental Sec. 233, which has applied to only special factory-built units.\* But the whole mobile-home industry hopes FHA will extend mortgage insurance to all mobile homes. Such a blessing would obviate a current threat—the probability that truth-

\* Financing may be either 230i market rate, in which case buyer may borrow 3% down payment from a lender, or 221 below-market, 25-year mortgages.



FHA-INSURED HOUSE resembles a mobile home.

in-lending will expose the exorbitant cost of present mobile-home financing and drive away both buyers and lenders (NEWS, May).

With FHA insurance, and the relatively low-cost mortgage money it would attract, "there would be no stopping mobile-home makers," says a Wall Street stock analyst.

But FHA's Charles Dieman, who initiated the Ashburn experiment, remains noncommittal:

"We will wait and play it by ear. After the Ashburn project, and some others, we will listen to noises from both sides—the pros and the cons."

**Working together.** The success of Ashburn and the other experimental projects depends on how well FHA and the mobile-home makers compromise. And indeed, both have reasons to bend over backward.

The FHA, under direct pressure from President Johnson, must triple its low-price housing production. And the mobile-home

industry, which produces an average unit for \$5,700, is worth a try.

For mobile-home makers, already producing 20% of new single-family units, FHA's push represents a chance to lock up the low-price housing field once and for all.

Although negotiations between FHA and some mobile companies have bogged down over cost limits, Dieman and Guerdon executives have shown that compromise is possible.

Guerdon has kept its beefed-up models between \$4,000 for a two-bedroom unit (576 sq. ft.) and \$7,000 for four bedrooms (815 sq. ft.). Yet Guerdon offers appliances, plus nonstandard mobile-home items such as 2x8 floor joists, gypsumboard walls, horizontal hardboard siding and pitched roofs with overhangs.

For its part, FHA has insured the units, though they still are strikingly similar to a 12'x48' mobile home Guerdon used as a basic model. The agency even waived its customary 2x4 framing and accepted 2x3 studs.

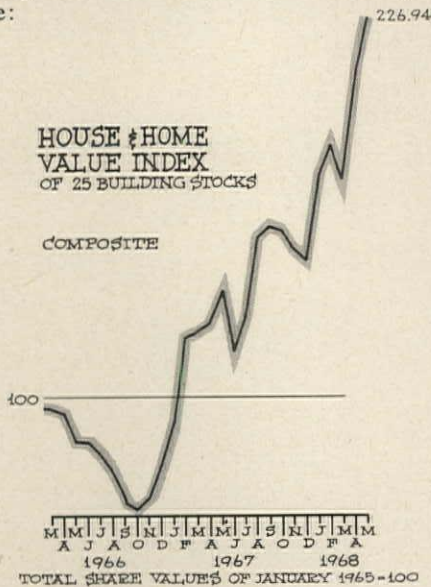
**Problems ahead.** At first look, Guerdon's Ashburn project seems on its way to success. Ten houses were sold before delivery, and FHA predicts that all 90 houses will be sold within a month.

But a closer look suggests that Ashburn may lack an all-important element—healthy profits for the mobile-home maker,

Story continued on p. 22

## Mobile homes lead a runaway in prices of housing stocks

HOUSE & HOME's average of 25 issues has leaped 33% in two months, paced by the phenomenal advance of mobile-home issues. They rose 75% in that time. The composite:



## HOUSING'S STOCK PRICES

COMPANY	May 6 Bid/Close	Chng. Prev. Month	COMPANY	May 6 Bid/Close	Chng. Prev. Month	COMPANY	May 6 Bid/Close	Chng. Prev. Month
<b>BUILDING</b>			First Mtg. Inv.	17	- 1/4	Tishman Rty. <sup>e</sup>	40 1/2	- 3/4
Capital Bldg. (Can.)	2.50	+ 35¢	Kissell Mtg. <sup>b</sup>	7 1/4	- 1/4	<b>MOBILE HOMES &amp; PREFAB</b>		
Cons. Bldg. (Can.)	1.20	25¢	Lomas & Net. Fin.	4 1/2		Con Chem Co. <sup>b</sup>	27	+ 7
Dev. Corp. Amer.	3 1/4	+ 3/4	-MGIC <sup>d</sup>	96 1/2	+13 1/2	-Champion Homes <sup>b</sup>	42	+ 6 1/2
Edwards Inds.	13	+ 5 1/4	Mortg. Assoc.	7 1/4	+ 1/2	-DMH (Detroit) <sup>b</sup>	12 1/2	+ 2 1/4
First Hartford Rty.	8 1/4	+ 1	Palomar Mtg.	4 1/4	+ 1/2	-Fleetwood	35 1/2	+ 9 1/4
First Nat. Rty. <sup>b</sup>	2 1/2	- 1/2	Southeast Mtg. Inv.	5 1/2	+ 3/4	-Guerdon <sup>b</sup>	36 1/4	+11 1/2
Frouge	5 1/2	- 1/2	United Imp. & Inv. <sup>b</sup>	14 1/2	+ 4 1/4	Princess Homes	29	+ 4 1/2
-General Bldrs. <sup>b</sup>	7 1/4	+ 1 1/2	<b>LAND DEVELOPMENT</b>			Redman Indus. <sup>b</sup>	30 1/4	+ 3 1/2
-Kaufman & Bd. <sup>b</sup>	38 1/2	+ 6 1/4	All-State Prop.	5 1/2	+3.62	Rex-Noreco	28	- 6
Key Co.	7	+ 3/8	American Land	14 1/2	- 1/2	-Skyline	94 1/2	+18
(Kavanagh-Smith)			Arvida	18	+ 1 1/4	Town & Country Mobile <sup>b</sup>	26	+ 3 1/4
Nationwide Homes	2 1/2		Atlantic Imp.	7 1/4	+ 1	Albee Homes	2	+ 1/2
Presidential Realty <sup>b</sup>	15 1/4	+ 3 1/4	Canaverl Int. <sup>b</sup>	5 1/2		Natl. Homes A. <sup>e</sup>	9 1/4	+ 3 1/4
Sproul Homes	8 1/4	+ 3	Christiana O. <sup>b</sup>	5 1/2		Scholz Homes	19 1/4	+ 7 1/2
U.S. Home & Dev.	9	+ 2 1/4	Cousins Props.	46	+15	Swift Industries	3 1/2	+ 3/8
-Jim Walter <sup>e</sup>	64 1/2	- 6 1/4	Crawford	5	- 1/2			
-Del E. Webb <sup>e</sup>	8	- 3/8	Deltona Corp. <sup>b</sup>	31 1/2	+ 6 1/2			
Western Orbis <sup>b</sup>	3 1/2	+ 3/8	Disc Inc.	3 1/4	+ 3/8			
(Lou Lesser Ent.)			Fia. Palm-Aire	5 1/2	+ 2 1/4			
<b>S&amp;Ls</b>			Garden Land	5 1/2	+ 1			
American Fin.	30 1/2	+ 2 1/2	-Gen. Devel. <sup>e</sup>	19 1/2	+ 3/4			
Calif. Fin. <sup>e</sup>	6 1/4	- 1/2	-Gulf American <sup>b</sup>	11 1/2	+ 2 1/2			
Empire Fin.	13 1/2	+ 1 1/2	-Holly Corp. <sup>b</sup>	2 1/2	+ 1/2			
Equitable S&L	15 1/4	+ 1/2	Horizon Land	14 1/2	+ 3 1/4			
Far West Fin. <sup>e</sup>	13 1/4	+ 2 1/4	Laguna Nig.	6 1/4	+ 1 1/2			
-Fin. Fed. <sup>e</sup>	20 1/2	- 3/4	Major Rty.	5 1/4	+ 3/8			
-First Char. Fin. <sup>e</sup>	31 1/4	- 3/4	-McCulloch Oil <sup>b</sup>	31 1/2	+ 8 1/4			
First Fin. West.	7	- 1 1/4	So. Rty. & Util. <sup>b</sup>	7	+ 1 1/2			
First Lincoln Fin.	8 1/2	- 1/2	Sunasco <sup>e</sup>	15 1/4	+ 7 1/4			
First Surety	7 1/2	+ 1 1/4						
First West Fin.	3 1/2	- 1/2	<b>DIVERSIFIED COMPANIES</b>					
Gibraltar Fin. <sup>e</sup>	30	- 2 1/2	City Invest. <sup>e</sup>	55 1/2	+10 1/2			
-Great West Fin. <sup>e</sup>	19 1/4	- 1 1/2	Forest City Entr. <sup>b</sup>	14 1/2	+ 1 1/2			
Hawthorne Fin.	9 1/2	+ 3/4	Rouse Co.	28	+ 7 1/4			
-Imperial Corp. <sup>e</sup>	9 1/2	- 1/2						
Lytton Fin. <sup>e</sup>	7 1/4	+ 3/8						
Midwestern Fin. <sup>b</sup>	5 1/4	+ 1 1/2						
Trans-Cst. Inv.	3	- 1/4						
Trans World Fin. <sup>e</sup>	12 1/2	- 3/8						
Union Fin.	12 1/4	+ 1/4						
United Fin. Cal. <sup>e</sup>	18 1/2	+ 5/8						
Westco Fin. <sup>e</sup>	20 1/4	- 1 1/2						
<b>MORTGAGE BANKING</b>								
-Advance	11 1/2	+ 1 1/2						
-Associated Mtg.	8 1/2	- 1/4						
Charter	26 1/2	+11 1/2						
-Colwell	17							
-Cont. Mtg. Inv. <sup>e</sup>	59 1/2	+ 4 1/2						
Cont. Mtg. Ins.	13	+ 3/4						
FNMA	74 1/2	- 1/2						

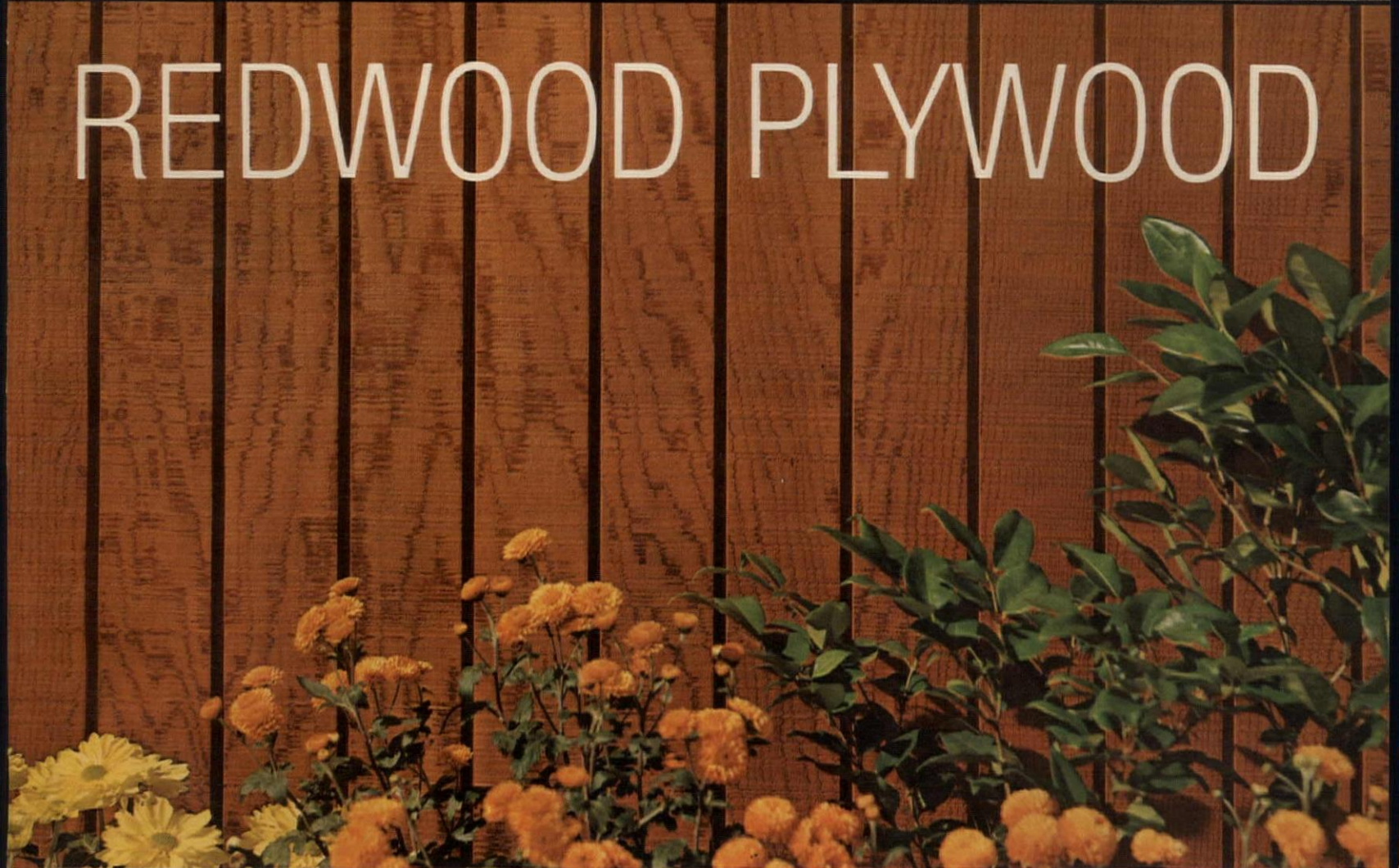
How the top five did in each category:

Category	May '67	Apr. '68	May '68
Builders	149.87	278.73	275.33
Land develop.	212.38	296.16	350.83
Mortgage cos.	176.62	272.45	305.47
Mobile homes	83.72	278.66	367.70
S&Ls	110.20	136.41	133.61

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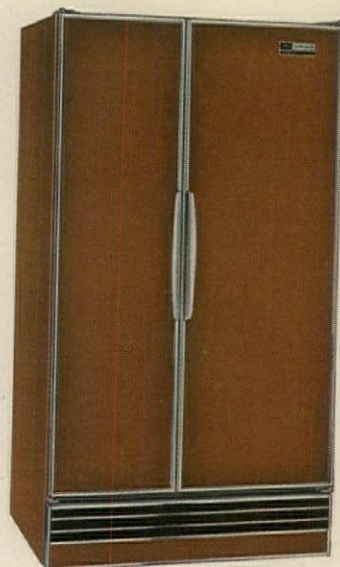
Plywood-producing mills: The Pacific Lumber Company • Simpson Timber Company



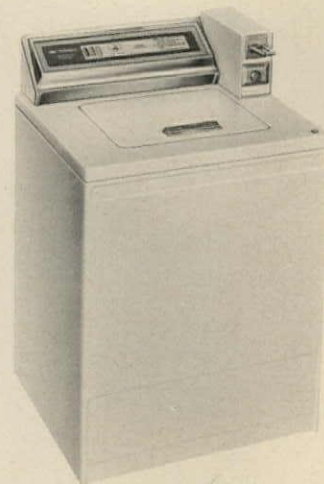
Two-speed dishwasher provides GENTLE WASH for delicate and light-weight items, SUPER WASH for others. Fronts may be custom-decorated. (SSU-100)



Built-in cooktops (gas or electric) are easy to clean, designed for quick installation. Extend only 3" below countertop. (RRG(U)825, gas shown)



Connoisseur\* Twin has automatic ice maker, door trim frames that can hold 1/4" panels, wallpaper, etc., reversible door hinges. (ESD-21MM)



Commercial washers with rugged cabinet, motor, sealed transmission, exclusive SURGILATOR® agitator. Capacity up to 18 lbs. (CSA 3000)



Built-in range hoods to match Whirlpool appliance colors. Exhaust odors and grease fast. Vented or non-vented in four widths. (RRH-230)



Built-in ovens (gas or electric) with full-width Panoramic smoked-glass doors. Lighted control panels. Fast, even broiling. (RRE2998, electric shown)

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Washer with new Super SURGILATOR® action. Dryer with new two-way door. Special care for Permanent Press fabrics. Wood-panel fronts. (LTA/LTE 9920)



Set-in ranges hang from countertop, need no pedestals or braces. Gas or electric models are easily installed. Deluxe features. (RRE2800)



New Connoisseur® range combines a convenient eye-level oven with the "Forgettable Oven" that cleans itself easy as one-two-three. (RTE9678)



Food waste disposers have insulated sound shield, super-speed grinding. Exclusive service plate makes motor removal easier. (SMD-80)



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Ask your Whirlpool distributor for details about any of these benefits. He'll be glad to show you what's new.

  
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CORPORATION  
Benton Harbor, Michigan

\*Tmk. \*\*Service mark of Whirlpool Corporation

Benton Harbor, Michigan

## Mobile homes: Everybody is trying to get into the act

Both prefabbers and homebuilders now want to buy mobile-home companies as pipelines into that industry's pot at the end of the rainbow.

But the asking price for publicly held mobile-home makers, many of whose stocks trade at 25 times earnings, is high. So buyers are turning to the industry's 230 privately held companies.

Two prefabbers, Scholz Homes of Ohio and Hodgson Houses of Massachusetts, have just announced purchase deals. And homebuilder Eli Broad says he is "talking" to a few companies.

Prefabber Donald J. Scholz has agreed to pay about \$15 million (765,000 common shares at \$20 each) to merge with one of the mobile-home industry's founders, Schult Homes Corp. of Indiana. By merging, the two companies hope to reach sales of \$40 million next year. Schult earned \$1.2 million on sales of \$18 million in 1967. And Scholz earned \$419,677 on sales of \$9.1 million (H&H, Mar.).

The merger, says Scholz, provides "the nucleus of a General Motors of housing."

Scholz's own prefab division will remain solidly established in two markets—houses

for \$20,000 and up and apartments. Schult's mobile division will serve the low-cost market. Says Scholz:

"This under-\$10,000 market has been taken over by the mobile home."

Together, Scholz and Schult plan to produce two-part sectional houses for the burgeoning \$10,000-to-\$20,000 market. In fact, Scholz says, "The manufacture of this house [four section models in all] is the motivating reason for the merger."

Schult's Walter Wells will become board chairman of the merged company; Scholz will be president.

In another deal, Hodgson Homes, the nation's oldest prefabber, has acquired Americana Mobile Homes Inc. of Pennsylvania. The price: more than \$450,000 in stock—83,330 common shares valued at \$5 each and 2,500 shares of preferred with par value of \$10 each.

Hodgson, which earned \$71,469 on sales of \$5.2 million in the year ending Feb. 29, expects Americana to add \$5 million to sales.

Meanwhile, frugal Eli Broad, who has been in the market for a mobile-home company for months, told a New York press conference:

"We still want a mobile-home maker. But I am not sure we want to pay the admission price at this time."

NEWS continued on p. 26

## FHA and the mobile-home makers ..... continued

the mortgagor and the land developer.

Mobile-home makers rely on large-scale production to compensate for their notoriously thin profit margins (about 4% after taxes). But union and code restrictions in heavily populated market areas could prevent large-scale production. In the foreseeable future, the FHA experiments will be limited to small rural towns such as Ashburn (pop. 4,700).

And even though Guerdon is turning out only 90 special units for Ashburn, it had to set up a separate assembly line.

Profit for mortgagors seems limited too. A well-placed source says Prudential Life

Insurance Co. will realize less than a 5% yield at Ashburn. "Prudential", says the source, "wanted to get its foot in the low-cost door."

And developers, who actually sell the units, can expect gross profits of only \$100 to \$500 on each house. To make even that, they must keep their land-development costs down to \$800 a lot.

So many developers may shy away. Indeed, Ashburn's developer, H. A. Hanner, is a local Guerdon dealer who has developed only one other subdivision. Asked if he expected a profit, Hanner said:

"I sure hope so."

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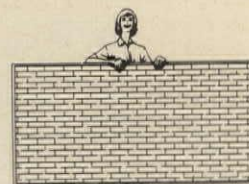


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## NEWS

continued from p. 22

### A cliffhanger—three companies vie for the 2,000-acre Marincello site

The parcel located across the Golden Gate from San Francisco is already zoned for planned-unit development. Its value: at least \$20 million.

For five years developer **Tom Frouge** of Connecticut has tried vainly to build his new town of Marincello there (proposed population: 20,000). But now two Frouge Corp. creditors, VTR Inc. of New York and the Gulf Oil Corp., have filed lawsuits that, in effect, put the site up for grabs.

Says a Frouge insider, "Now that we have the land ready for development, everybody wants it."

In February VTR, formerly Vanderbilt Tire & Rubber Co., sued the Frouge Corp. for \$700,000. That money had been advanced to the 52-year-old developer in 1966 as part of a joint venture that was later abandoned. Then in April VTR's new chairman, California developer **Frederick Gould**, began making plans to auction Frouge's development rights at Marincello, which Frouge had put up as collateral in 1966. Gould says he would bid for the rights at auction.

Frouge has counter-sued for \$2.5 million in damages, alleging that former VTR officials misstated their company's financial condition. (After Frouge sued, a federal grand jury in New York



**DEVELOPER FROUGE**  
A five-year journey to court

indicted VTR's former president, **Harold Leitman**, and three associates for conspiracy, mail fraud and making false financial statements from 1962 through 1964. All pleaded innocent.)

And now Gulf, which holds title to 95% of the site under a leaseback deal with Frouge, has filed its own suit. The action could knock both Frouge and VTR out of Marincello. Gulf asks the courts to determine the rights of Frouge, VTR and Gulf under the 1963 leaseback deal.

Inside sources say Gulf officials insist that Frouge is in default on the 1963 deal and that the contracts held by VTR can thus be ruled invalid.

### Cortese sells out of trouble

After months of trying, retirement king **Ross W. Cortese** is beginning to sell off some of his 7,355 acres of stockpiled land.

The buyers are California's Kaufman & Broad and a group headed by a former Cortese employee.

Cortese, president of Rossmoor Corp. of Laguna Beach, Calif., amassed the inventory two years ago by invading Chicago, New Jersey and Maryland all at once. East Coast sales were disappointing, and when money tightened, Cortese abandoned the undeveloped Chicago site. For a time last year, his entire Leisure World empire seemed in peril (News, Nov. '67).

But the 50-year-old California builder appears to be working his way out of difficulty. In separate deals, Cortese will probably realize \$17.2 million for 3,300 acres in Chicago. The land carried a \$10.7 million mortgage held by the Metropolitan Life Insurance Co.

President **Eli Broad** of Kaufman & Broad (News, April) has bought 420 choice acres for \$6,500 an acre. Commercial and multifamily zoning is pending on 70% of the site, which adjoins a

Levitt & Sons subdivision (News, Dec. '67).

The Cook County (Ill.) Forest Preserve District has filed a condemnation suit for the remaining 2,910 acres. Bargaining price: about \$5,000 an acre.

For \$12 million, Cortese has agreed to sell 1,400 acres and a golf course at Walnut Creek, Calif., (pop. 5,000) to a group headed by ex-project manager **William Irish**. United California Bank, which has advanced Cortese \$12 million, lent Irish's Terra California Corp. a "substantial sum" for the deal. Irish will continue developing Walnut Creek as a retirement project.

In New Jersey, meanwhile, Englehard Hanovia—the family holding company of multimillionaire **Charles W. Englehard**—has purchased a 631-acre industrial park from Cortese. Cortese still owns 1,500 acres.

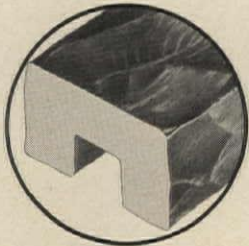
**LENDERS:** **Harry Huter**, head of Lomas & Nettleton Co., New York, a mortgage banking subsidiary of Lomas & Nettleton Financial Corp. (Dallas), joins the Fidelity Bank of Beverly Hills, Calif., as vice president.

NEWS continued on p. 30



# LITE-BEAMS<sup>®</sup>

Patent Pending.



*will help you sell  
more homes faster...  
at 1/5 the installed cost of  
conventional hand-hewn wood*

Totally new! Truly revolutionary! Molded polyurethane Lite-Beams<sup>®</sup> defy comparison with wood . . . weigh **less than 1/2 lb./running foot** . . . go up in minutes with adhesives on any surface . . . indoors or out . . . require **no** auxiliary carpentry, plastering, painting or masonry . . . can be nailed, cut with a knife, sawed or drilled . . . channel can be used to hide small diameter pipes or wiring . . . come pre-finished in three popular shades . . .

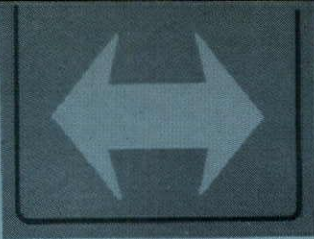
**LITE BEAM** DIVISION of AM-FINN SAUNA, INC.  
Haddon Avenue & Line Street, Camden, N. J. 08103

Prospects will snap up homes, clients will approve plans faster when you include the look of authentic hand-hewn beams at minimal extra cost. In a word. Lite-Beams are HOUSE MOVERS.

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Haddon Avenue & Line Street, Camden, N. J. 08103  
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## Next year...even better.

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Grote-quality cabinet with exquisitely carved gold frame in basic oval shape lovely in any setting.

## All the magic of mirrors

without sacrificing that needed storage space

How can you sell your home or rent your apartment weeks earlier? With the opulent touches you can provide with decorator bathroom cabinets at less cost than with anything else. And with more opulence for fewer dollars from Grote than from any other.

Not to mention the space-enlarging effect with mirrors that will make a compact bathroom look twice as big . . . without sacrificing the needed extra storage space provided by the cabinet.

Grote has bought a whole mirror plant (Hagemann of Shelbyville, Ind., famous in mirrors since 1892) to bring you the most in mirror sales-magic. Mirror-doors on bathroom cabinets, rolling or fixed wall mirrors, decorator mirrors for every room in the house.

This complete integration of our mirror manufacturing gives us something most important to you, the builder: complete quality control from selection of glass through silvering, backing, framing, and mounting devices.

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Send us your new full color catalog C-467: the industry's most complete line of bathroom cabinets, mirrors, and accessories, including over 100 decorator stylings.



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Signed \_\_\_\_\_ Title \_\_\_\_\_



**ANTOINETTE**  
Cabinet with superbly sculptured gold frame reflecting both the good taste and the affluence of a golden era.

## NEWS

continued from p. 26

Wide World Photos



NIXON



EISENHOWER



ROCKEFELLER

## GOP on slums: How do I level thee? Let me count the ways

In all, the Republican Party has come up with three suggestions—one by each of the three top GOP spokesmen.

Nelson Rockefeller urges the spending of \$150 billion (repeat billion) to rebuild the cities in ten years. Richard Nixon steals an idea from Stokely Carmichael, of all people, and plugs "black capitalism." And the Grand Old Party's grand old man, Dwight D. Eisenhower, proposes the construction of "wholesome new towns" for ghetto residents on abandoned Army posts.

Although their plans differ, the GOP leaders have the same listener in mind—the urban voter. Apparently, the Republicans have learned one of the lessons of 1964: You can not get far without some appeal in the cities.

Rockefeller rolled out his expensive rebuilding blueprint at a Washington, D. C. gathering of newspaper editors, who proceeded to sit on their hands throughout his 30-minute speech.

The New York Governor, who a few days later proclaimed himself an active Presidential candidate, brushed over "fiscal integrity" on his way to stressing the

need for "imaginative and responsible use of credit." Rocky's multi-faceted plan hinges on the sale of public and private bonds, a route pioneered in New York.

(For example, the Governor has just created a bond-supported Urban Development Corp. that has virtually unlimited power to condemn land and rebuild sections of any New York city.)

On a nationwide radio broadcast, the GOP's other presidential hopeful, Dick Nixon, said, "Ghettos will be remade when the people in them have the will, power, resources and skills to remake them. They won't be remade by government billions."

He added that "black ownership" would lead to "black jobs, black opportunity and, yes, black power."

Former President Eisenhower stepped into the Rocky-Nixon dialogue by unveiling his own "top-to-bottom" attack on big-city problems in a copyrighted *Reader's Digest* article:

"The first essential of any realistic housing plan is to reduce the density of population by encouraging large numbers of people to locate in wholesome new towns."

## The Mortgage Bankers make a bid and win back FNMA's auction expert

It's a gala homecoming for Oliver H. Jones, architect of Fanny May's new mortgage auction.

A year after leaving his post as research director of the Mortgage Bankers Assn., Jones will return as executive vice president. He takes over in October from John de Laittre, who retires.

The rotund, pipe-smoking economist had been the MBA's director of research for five years when he left to become a consultant serving, among others, the Federal National Mortgage Assn. (NEWS, Oct. '67). Jones had initiated the proposal for an FNMA mortgage auction in the MBA's position paper for the Senate banking committee's study of mortgage credit (NEWS, July '67). He wrote the FNMA's scenario

for mortgage auctions, did much of the educational work among mortgage men and penned FNMA President Ray Lapin's speeches.

For this and other reasons, Jones returns to MBA with an independent reputation as one of the nation's top mortgage economists. His Senate committee treatise is now recognized as the most comprehensive of the 25 papers submitted, and his own hard-hitting speeches in the last nine months have provided a virtual textbook of basic reforms for mortgage financing. Most of Fanny May's so-called bold new projects—trust certificates, a loan-trading desk, a market in mortgage futures—were suggestions that Jones originated or revived from earlier experts' writings.



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Emerson Electric Co., Garfield, New Jersey

# There are easier ways to move a house

Maybe you've never considered faucets a very important sales feature of your homes. But maybe you should. For example, consider the really important rooms

in a home. Like the kitchen. And bath.

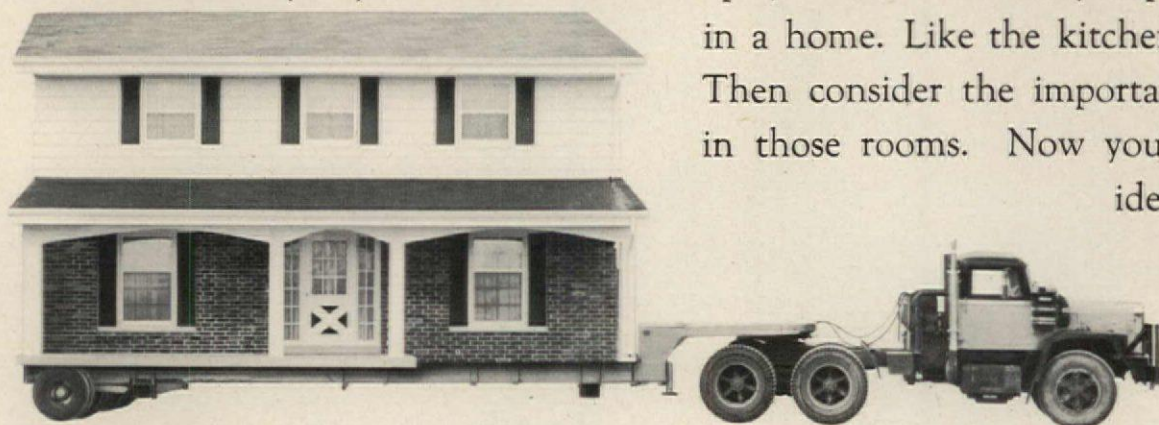
Then consider the importance of water in those rooms. Now you've got some

idea of just how

important a

good faucet

can be.



## ...here's one.

What's so special about Cole single-control faucets? Well, to

begin with, we took

special pains to design our faucets so they'll never leak or wear out. Ever. You

see, Cole faucets have no washers. No gaskets.


No springs. Or any of the other parts that fail or need adjustment in ordinary single-control faucets. We

find this arrangement makes things a lot easier on us. And you.

Finally, we also took special pains to design our faucets so that their contemporary and tasteful beauty will be an immeasurable asset to any kitchen or bath. Now

then. Want some help in moving your homes? Just give us a call. Or write for descriptive literature. Cole. The single-control faucet that's designed to last a lifetime.



 **COLE VALVE CORPORATION**

A subsidiary of Bradley Washfountain Co.  
9101 FOUNTAIN BOULEVARD  
MENOMONEE FALLS, WIS. 53051



Architect: Robert G. Clark, Crown Point, Indiana Builder: Cooper Homes Inc., Gary, Indiana

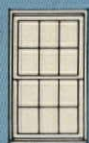
*Las mejores casas de cada vecindad ostentan puertas de patio de madera. ¿Se han fijado Vds.?*

**OR...** The Better Homes in Every Neighborhood have WOOD PATIO DOORS. Have You Noticed?



## CARADCO Wood Patio Doors

Eliminate costly call-backs... assure customer satisfaction. Outstanding weathertightness, durability and easy operation are achieved through: Wood construction • 1/2" Insulating glass • Thermal barrier sill • Floating action weatherstrip • Jump-proof screen • Nylon rollers.



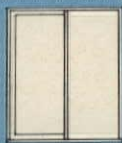
Double-Hung Windows



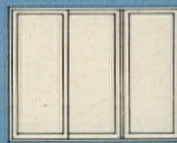
Casement Windows



Awning Windows



Slider Windows



Patio Doors

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America's finest line  
of appliances and  
professional  
building services  
together  
under one  
roof.**



# Hotpoint's "Single-Source" program. It's for builders who don't have time to waste.



You can get all the appliances you need in the same place. Hotpoint. And Hotpoint backs these up with the finest planning services in the country.

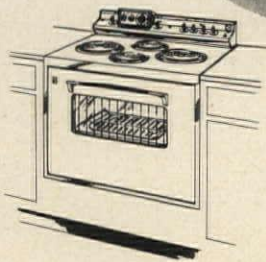
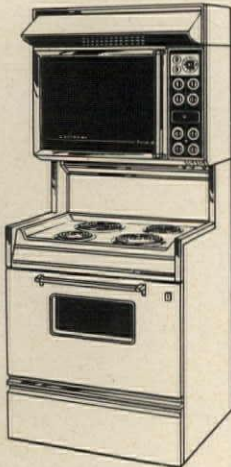
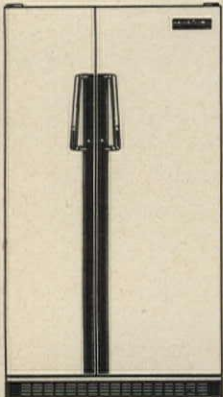
Our consultants can provide technical know-how that

can help you cut costs. Services include kitchen and laundry planning, interior and exterior lighting, heating and air conditioning calculation and layout (including operational cost estimates), merchandising and promotional planning, professional sales counseling.

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See Hotpoint's complete Builder line insert in Sweet's catalog.

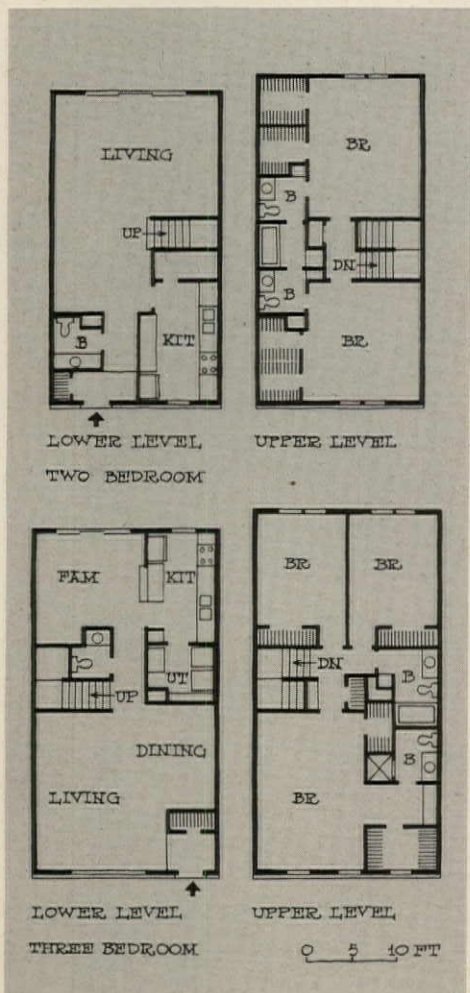


LANDSCAPED MALL provides an attractive and quiet entrance to a typical block of 16 units (site plan, below.) Recreation area can be seen at rear.

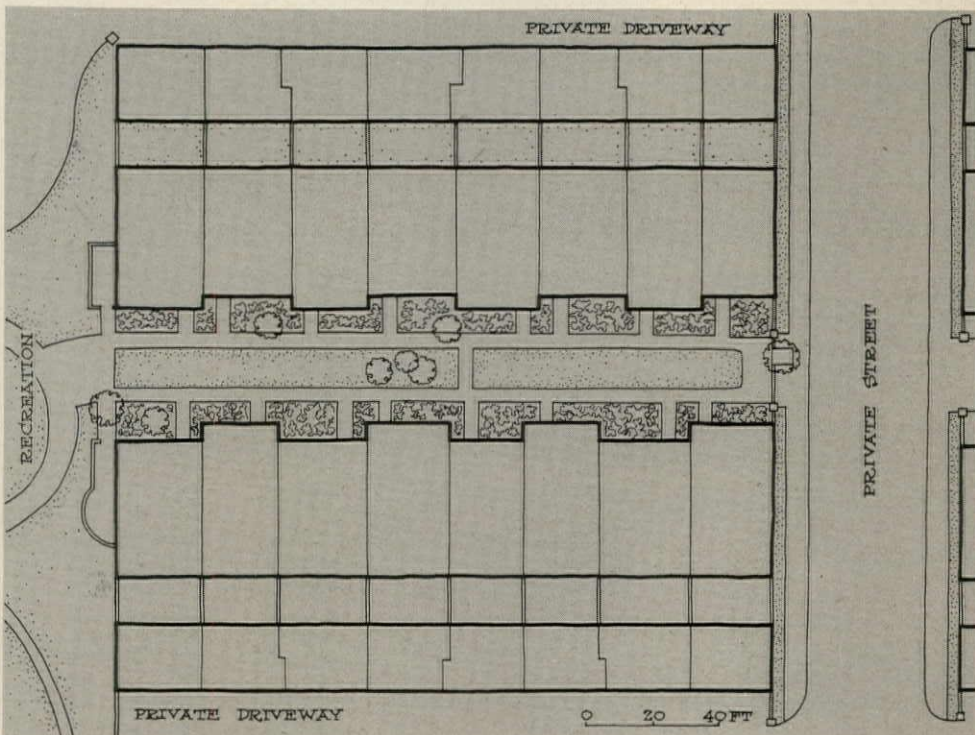
These townhouses were designed for a prestige residential area

They are part of a 194-house, 14½-acre project in a well-established neighborhood of detached houses in Houston. Four basic two- and three-bedroom plans (two are shown below) are arranged in blocks of 16 units with entrances facing landscaped malls (site plan, below). Small courtyards and garages behind the houses are reached

by private driveways leading from roads that circle a central three-acre recreational area. Opened in 1966 by J. L. Philips, all of the houses have been sold at prices ranging from \$16,350 to \$28,684. Designs are by Langwith, Wilson & King. Indoor living areas have from 1,060 to 1,950 sq. ft. plus attic storage space.



WELL-PLANNED UNITS have big closets, walk-in pantries, laundries, 2½ baths.



SITE-PLAN SECTION shows how typical block of 16 units flanks a mall leading from private street to park. Rear garages of each eight-unit group share a dead-end driveway with units of next block.

Letters start on p. 42

# Apartment builders: Float-Away can deliver the door... to the opening in the room of the apartment on the floor at the job... by the clock.

We go to any lengths—or heights—to get our metal bifold closet doors "on location" for hot-schedule construction jobs.

We use computers.

By feeding them data from a simple form (available from us or our dealers) we can program the entire order—by individual sizes and openings—and gear everything to your delivery timetable.

That means every single Float-Away door gets laid down, at the exact spot you want it installed—the right opening of the right room of the right apartment on the right floor.

You might say we have a "fit" at every opening.

Figure your savings in distribution and hoist time, and extra handling expense. It all adds up.

*People want metal bifolds for closets. Only Float-Away makes them so practical and profitable to you.*



MORE SALES! MORE SAVINGS! WITH NEW

## Float-a-just SHELVES

Add sales: Only Float-A-Just shelves offer your customers splinter-free beauty PLUS the strength of heavy gauge steel.

Save installation time: Shelves are factory finished and installable in minutes... with or without rods.

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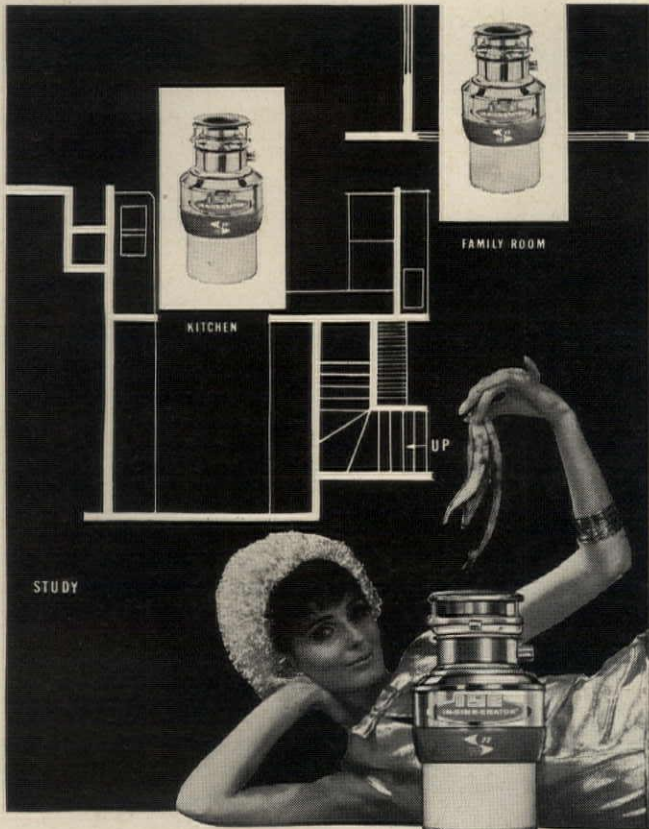
**DURAFLAKE COMPANY**



Division of Willamette Industries, Inc., P.O. Box 428, Dept. I Albany, Oregon 97321

Circle 51 on Reader Service card





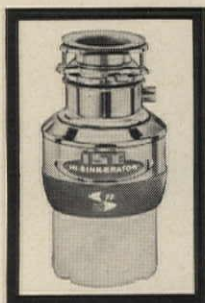
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Introducing In-Sink-Erator Model 77 for 1968: The smart look, long life and performance of shining stainless steel. And not just an ordinary but *double* warranty! A lifetime corrosion warranty *plus* 5-year parts protection.

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A second smash year on CBS radio with persuasive Arthur Godfrey. A great series of sales-making ads in LIFE, your prospect's favorite magazine!

Contact your Plumbing Contractor. Or write for full information and free sales aids.

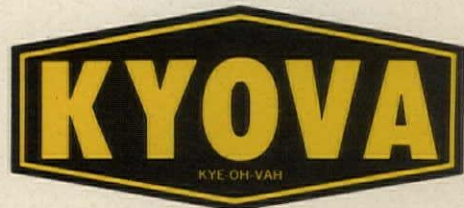
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Originator and perfecter of the garbage disposer  
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The  
Pipers  
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## Long Length Perforated Pipe


A recent survey proved that almost half of the contractors are using expensive materials or old-fashioned one foot sections for foundation drainage. In these days of high labor costs, why not switch to Kyova pipe in long ten foot lengths? See your supplier today or write for our booklet on how to slash costs with Kyova pipe.



Write today for your copy of "How To Slash Costs With Kyova Pipe."

## KYOVA PIPE COMPANY

Division of Ashland Oil & Refining Company  
1912 South First Street  
Canton, Ohio 45638

A black and white photograph of a closet door. The door is slightly ajar, revealing a furnace and an air conditioner inside. Above the door is a rectangular vent. The text is overlaid on the image in a large, bold, serif font.

**This closet has  
a furnace and  
air conditioner  
in it.**

The top of this seemingly empty closet contains Bryant's 513 fan coil unit with an electric heating package attached to it.

Both units are designed for installation above furred ceilings in closets or hallways. Together, they're only 10½ inches high and take up less than 6 cubic feet of space overall.

So instead of an 8-foot-high closet with furnace and air conditioner in it, you get a 7-foot closet with nothing in it.

(And that extra closet can make a big difference the way storage space is these days.)

The 513 fan coil is designed for use with Bryant's Quietline® condensing unit installed either outdoors or through the wall.

It features twin direct-drive blowers and four-speed operation in both 18,000 and 24,000 Btuh models.

A standard 8-by-30-inch duct flange for easy discharge duct hook-up.

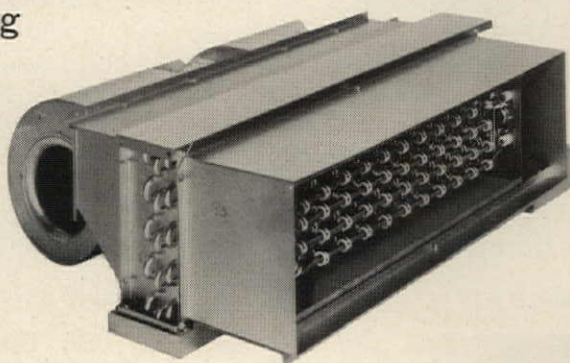
And a choice of heating packages: electric in 3, 5, 10 and 15 KW sizes, or hot water coil.

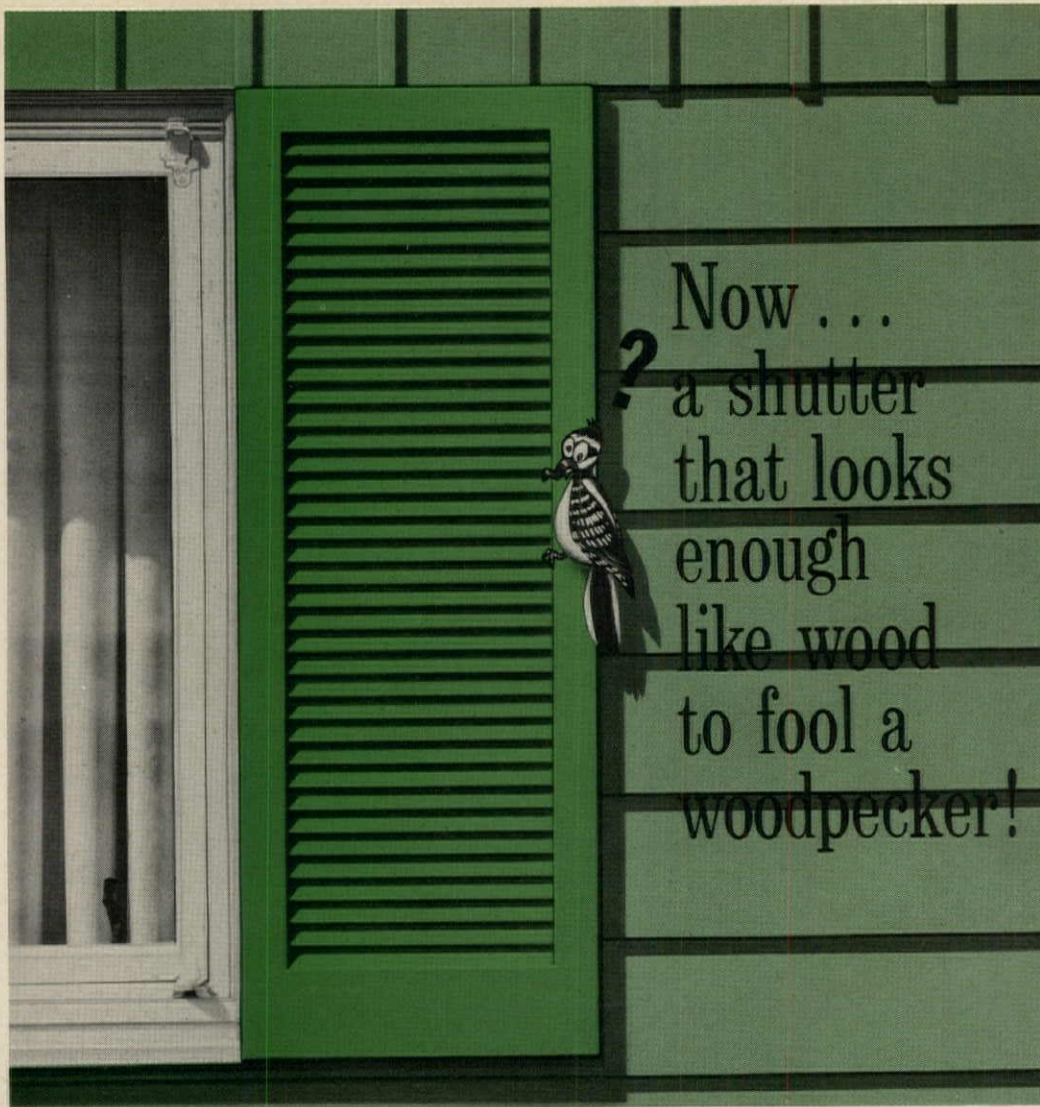
All this plus the kind of quiet, dependable performance you'd expect from Bryant.

Look at it this way: you're not losing a furnace or air conditioner — you're gaining a closet.

Bryant Manufacturing Co., 2020 Montcalm Street, Indianapolis, Indiana 46202.

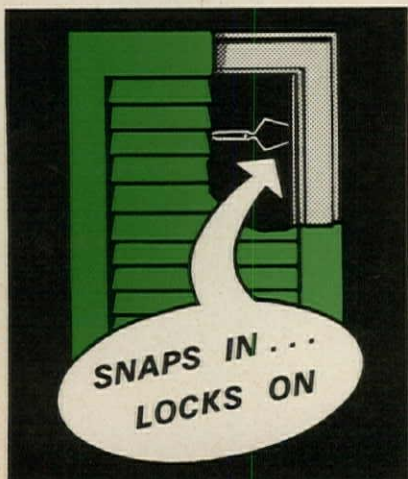
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- Finally there's a shutter that looks authentically like wood but is far more durable and practical. Even a woodpecker would be fooled by the new X-act Wood Mold Shutter . . . 100% abs polymer, thermo-formed over a mold designed from a wood shutter. No seams or rivets show. Louvers can't fall out. No painting needed . . . your choice of white, black or green.
- Installation is literally a "snap." Wire clips install fast on any type of exterior siding, and one quick push snaps the shutter into place and locks it on.
- The X-act Wood Mold Shutter won't buckle or bend when the weather changes, because the wire clips allow it to move slightly up and down as normal expansion and contraction occur. And the frame is the same abs polymer as the face, for uniform expansion of all parts—no twist or warp.
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We have more answers for your questions . . . just send the coupon.



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I am:  Builder  Dealer  Architect  Distributor

## LETTERS

### High-rent apartments

H&H: Your article on how to "skim" the cream off today's rental market" [Apr.] really hit home, as I am in the process of putting together a high-rental apartment development in a well-to-do neighborhood. The problem, as brought out in your article, of convincing lenders that there is a definite need for this type of development has been very difficult. This article will help many builders in this same predicament.

ARTHUR NEMROFF, mortgage financier  
 Arthur Nemroff & Co.  
 Philadelphia

### Housing mystiques

H&H: I take issue with part of your March editorial on "the mystique of easy solutions to housing problems."

I agree entirely on Mystique No. 1—technology—and on Mystique No. 2—urban design. But in Mystique No. 3—new towns—I think you are looking only at the new towns in the United States, most of which have been notably unsuccessful. New towns in Europe, particularly in Sweden and in the United Kingdom, have been successful as a means of stopping urban sprawl and providing a meaningful environment for people, although, admittedly, they have been created largely at the behest of and cost to government. And in Canada, at Bramalea, we have an equally successful new town produced by private enterprise.

Before committing yourself to sweeping editorials such as this, might I suggest that you look outside the borders of the U.S.

ALAN F. B. TAYLOR, president  
 Bramalea Consolidated Developments Ltd.  
 Toronto, Ont., Canada

### Stackup-housing modules

H&H: We very much appreciated the inclusion of Suspended Structures concepts in your April report on stackup-housing modules. As was demonstrated by the recent Building Research Institute conference on "instant space" in Chicago, an increasing dialogue is developing on the three-dimensional prefabricated modules. The emphasis there and in your article seems to be on factory fabrication.

What we in Suspended Structures are after is rapid quantitative production by all possible means. This is the nature of President Johnson's message to Congress on 20 million units in ten years. Our country must, therefore, look to its present resources for answers: a) Redeploy building processes on the ground at or near the site on a production line under cover; b) reestablish quality controls; c) vastly expedite apprentice training in all the trades. No massive tooling, presses, forms or curing are required.

I am hopeful that after your readers have accepted and understood the benefits of repetitive piling up of boxes, it would perhaps be appropriate to reemphasize suspension of them. It seems only in this manner that multiple use of land can be obtained and viable economic packages be conceived.

LESTER GORSLINE, president  
 Suspended Structures Inc.  
 San Francisco

H&H: Your article on stackup housing was most informative and helped me put this new area into better perspective.



**Why offer  
floor monotony?**



**NEW  
URETHANE  
PREFINISH**

## **Customize slab homes and apartments with Bruce Laminated Oak Blocks.**

Wall-to-wall monotony is all right for motel rooms, but creating a real home atmosphere calls for more. It calls for the warmth and style of a permanent-type floor like Bruce Laminated Oak Blocks.

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means savings for you in installation time and costs.

Because they're laid in mastic, Bruce Laminated Blocks are especially suitable for slab homes and apartments . . . and usually cost less than wall-to-wall carpeting. Nationally advertised. See our catalog in Sweets'.



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*World's largest manufacturer of hardwood floors*

Near the end of your article, you assert that, by comparison, better low-income housing can be provided through the use of precast concrete panels. I would appreciate very much your sending me a list of articles, case histories or organizations to which I could refer for further information on the use of precast panels in housing.

**JAMES E. GILLANDERS**, vice president and general manager  
Acme Brick of Louisiana  
Baton Rouge, La.



**TEN-TON HELICOPTER** used for this stackup job may also be used to transport modular boxes designed by Modular Facilities (*letter, below*).

**H&H:** Within the first week that your magazine reached subscribers, we started receiving calls and letters from developers and financial agencies anxious to work with us in producing modular housing. These were not just general inquiries, but specific projects they had in mind, in which our housing procedures could be used, and each project started above \$1 million.

**ELLIOT S. KRANE**, president  
Modular Facilities Inc.  
Old Bridge, N.J.

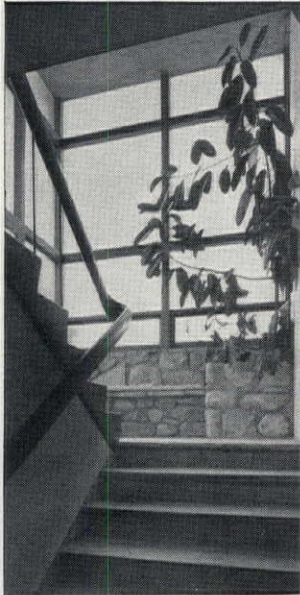
**HLBB and the S&Ls**

**H&H:** May I express pleasure that you printed part of my response [Letters, Apr.] to the January editorial in which you said, "The HLBB let the s&L industry down in 1966." But let me emphasize again that faced with another situation exactly the same as that we faced in 1966, the Federal Home Loan Bank Board would again be fortunate to do as well as it did to cope with the problem.

And the remarks which you quoted [Apr.] from a talk that I gave at New York University in no way, in my opinion, add credence to the claim that the Board let the industry down in 1966. Hopefully, both the Board and the industry learned much from the 1966 experience that will be helpful in the years ahead.

One objection to the tone of your editorial is that it failed to recognize that hindsight is usually superior to foresight.

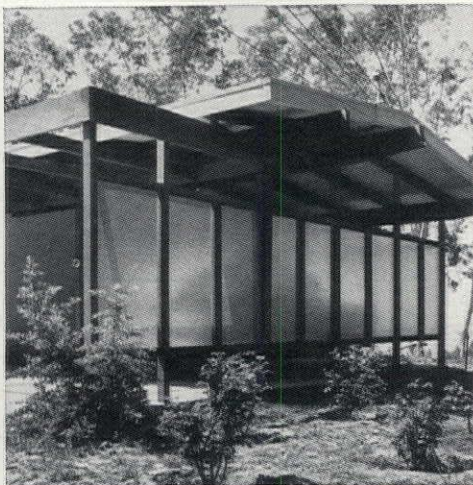
**JOHN E. HORNE**, chairman  
Federal Home Loan Bank Board  
Washington, D.C.



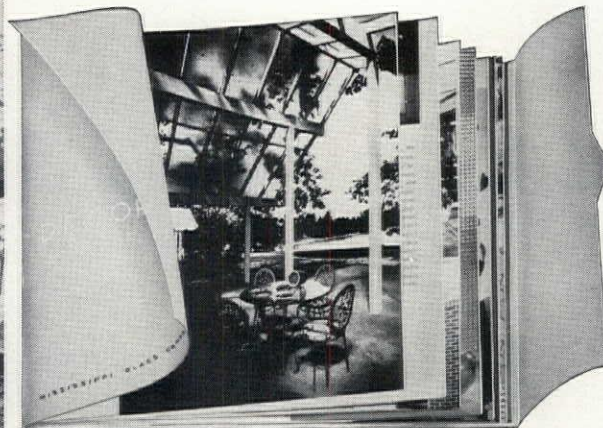
William Brockway residence, Los Angeles, Calif. Burton Schutt, architect. Reprint, Sunset Magazine. H. H. Baskerville, Jr., photographer.

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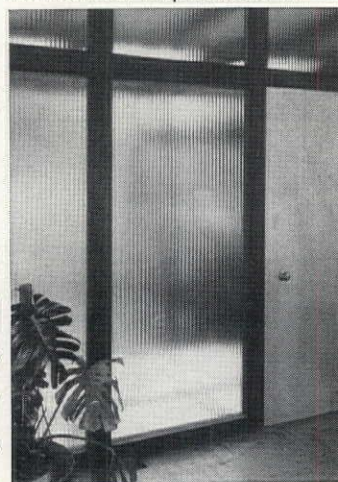
Shows how decorative glass brightens and beautifies homes. It is filled with dramatic illustrations of the ways translucent glass adds a touch of luxury and smartness to every room. Specify Mississippi Glass. Available in a wide range of exciting patterns and surface finishes wherever quality glass is sold.



Architects: Arbogast Jones Reed Associates, Los Angeles, California



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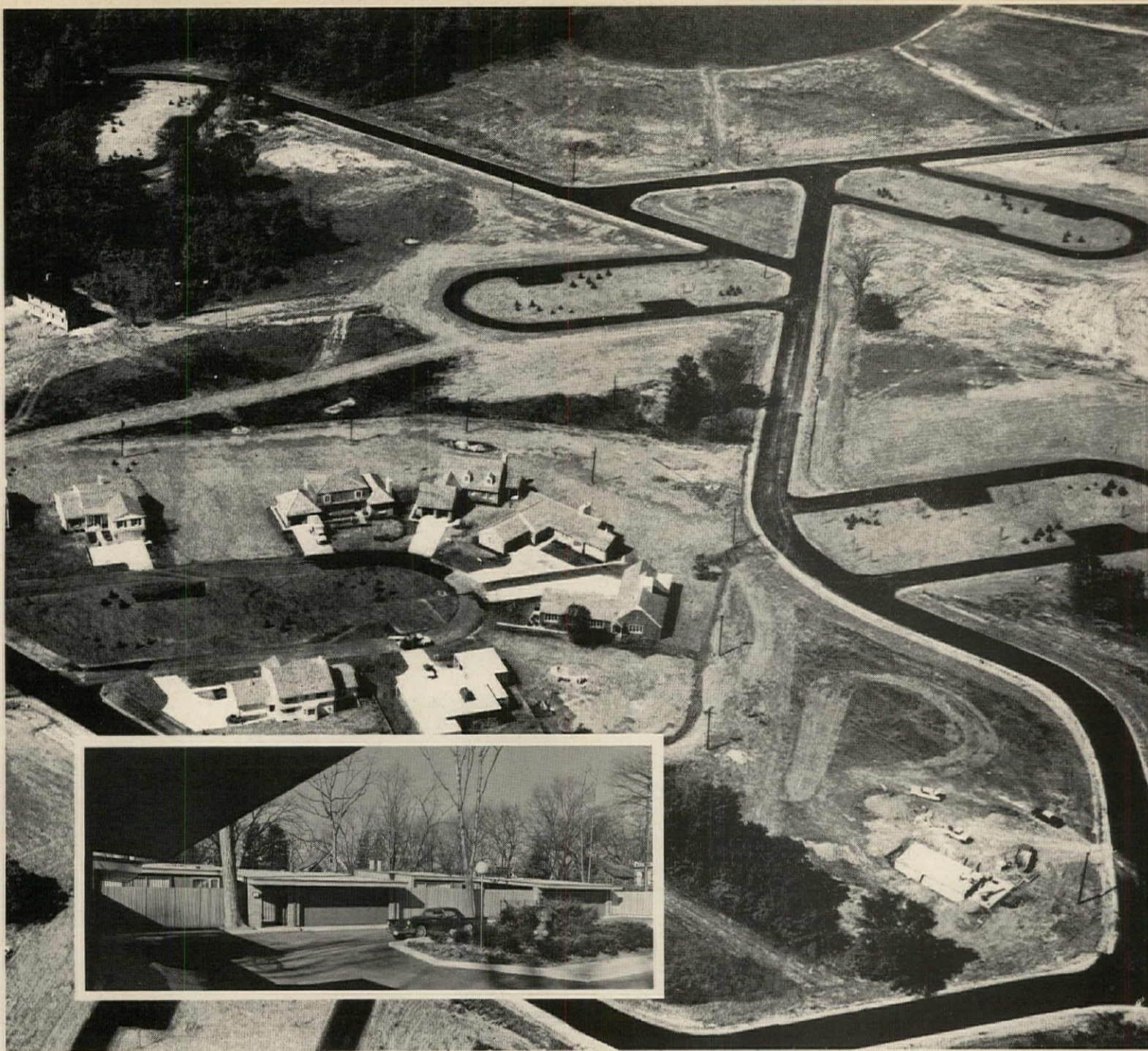
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
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Bold shapes! A six-foot bathtub... the new Caribbean. And a shampoo center that doubles as a baby bath, too!  
Bold! The Bold look of Kohler!



**BOLD GOLD!** New Flair fittings, by Kohler, present a gem-like beauty: diamond-bright acrylic and 24-carat gold electro-plate. As you see in the main illustration, they're quite at home with any color, from new Harvest Gold, to vibrant Tiger Lily.

**BABY'S TURN NEXT!** Now it's shampoo time. And so convenient at the Kohler shampoo center, the *Lady Fair*, with its wide, roomy basin, its easy-rinse spray arm. Makes an ideal baby bath, too. (You can use it for the lingerie later.)



**ACCENT COLOR LAVATORIES!** Bold contrast for new Harvest Gold and Kohler pastels. Rimless design for clean appearance, easy installation.



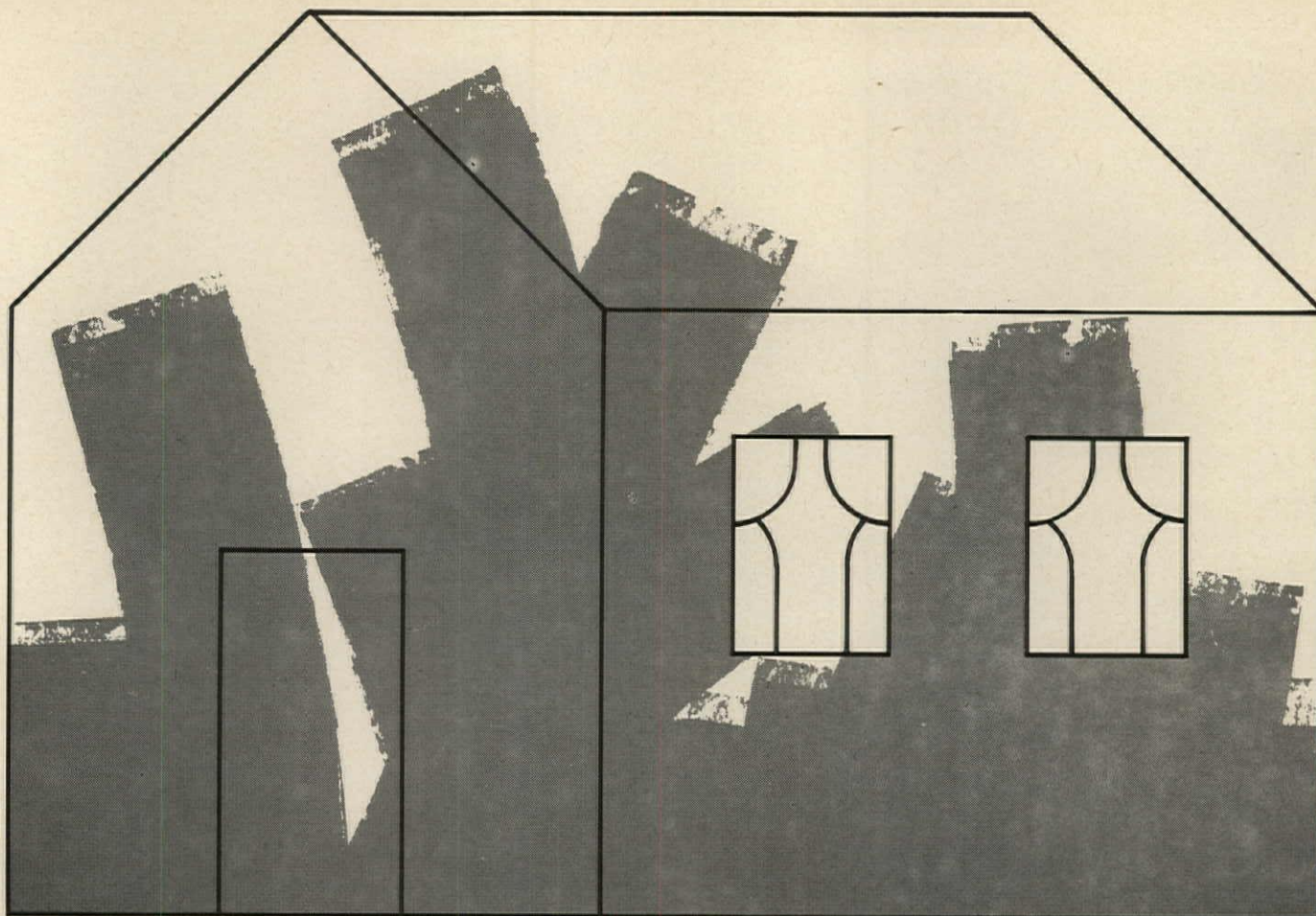
**THE WORLD'S MOST COMFORTABLE BATHTUB** is the Kohler Caribbean: a full six feet of stretch-out relaxation. Recessed grip rails. Slip-resistant Safeguard® bottom. Choose any exterior treatment: sunken tub, paneling, tile, plastic laminates—even run the carpeting up the sides!



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Rez Double-Tones are extra-heavily pigmented stains. They give you about twice the hiding power of other stains, yet cost no more.

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# Air King makes 182 different range hoods, all beautiful!

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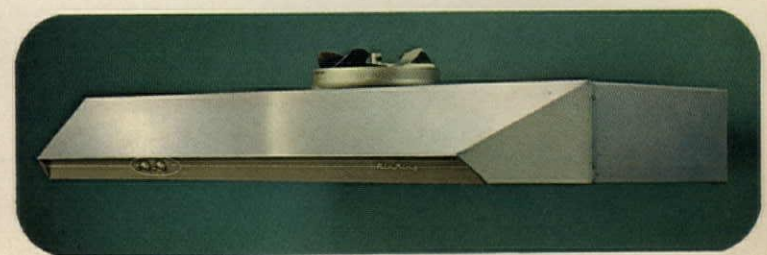
## *Air King*



Deluxe 3-speed Cabinet-Sav'R



above: Moderate-priced 2-speed Cabinet-Sav'R  
left: Hi-Flow ductless model with rechargeable filter system  
below: Low cost vertical discharge model





## The "OVERHEAD DOOR" electric makes a house a home.

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It's not just because these doors are surpassingly beautiful. It's something that transcends sim-

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Solid state, portable transmitter opens and closes garage door automatically by radio control from your car!



tic garage door operation. Keep an eye on the little lady, too. She's thinking about how the door actually improves the overall appearance of the house.

The "OVERHEAD DOOR" electric is installed, serviced, and warranted by a factory-trained door specialist. The warranty is for one full year and covers both material and workmanship. We give such a generous warranty because we build the best doors

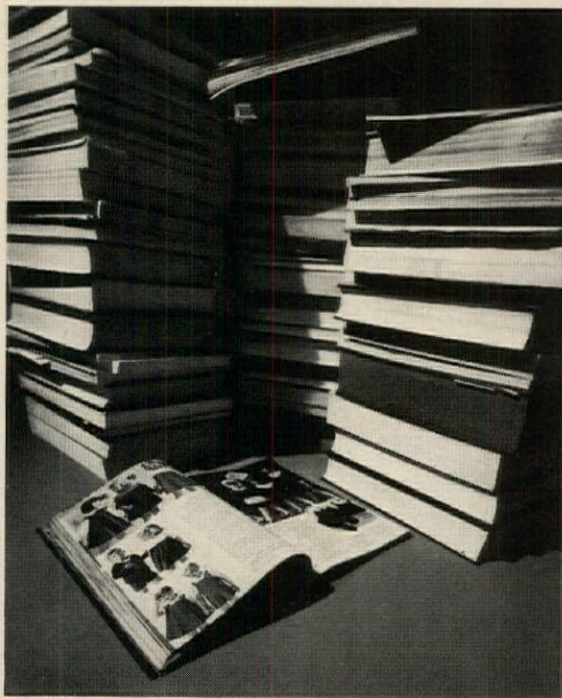
in the world. Just as we have been since 1921, the year we invented garage doors.

Put The "OVERHEAD DOOR" electric in every house you build. We make them in styles and materials to complement every architectural preference. Talk to your nearby Overhead Door distributor. His number is listed in the *white* pages of your phone book. He can add that extra ingredient that makes every house you build a home.



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# The wish books



## are they immoral?

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They seem to think that all those glorious catalogs—the kind in which you can lose yourself for hours on end in pleasant daydreams—encourage us to spend money on things we really don't need.

They think that all the different brands of the same kinds of products—all clamoring for your attention—represent an economic waste.

They'd like to avoid all that by having fewer brands competing for your attention. Less advertising.

**But, when you come right down to it,** that's not the kind of thinking that created so many of our jobs in this country.

It's not the kind of thinking that has given us a standard of living most of the world envies.

The ivory tower critics call competition wasteful.

Yet, isn't it *just this competition* that has created our jobs and our prosperity?

Isn't it competition that drives manufacturers to work harder . . . to bring out new products that make life easier and more fun . . . to build better products and to keep prices down?

Manufacturers *have* to innovate and build better and keep prices in line . . . **or Americans just stop buying.**

That's the way the system works. We, the consumers, have the ultimate weapon—**free choice.**

And, since nobody knows how much you can interfere with the free-choice system without damaging it . . . *let's be careful about how we tinker with it in response to the critics.*

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The mind boggles.

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Office building, Monterey, California.  
Architect: Frank Laulainen A.I.A. & Associates, Los Gatos

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*Forest products  
designed for better living*

See our catalog in Sweets file, under sidings



Town House complex, Los Altos, California  
Architect: Garcia & Cole, John W. Cole A.I.A., Los Altos

# Anacondability pulls the plug on plumbing bottlenecks, saves space, speeds construction on every type of building.

## Adds value

to single family dwellings. Copper plumbing in a home says "quality" as no other material does . . . adds significantly to its worth and marketability. And the Anaconda name on the copper tube and pipe enhances the builder's reputation for using only the best.

Added advantage: Anaconda provides a broad range of tube and fittings to meet every blueprint requirement.

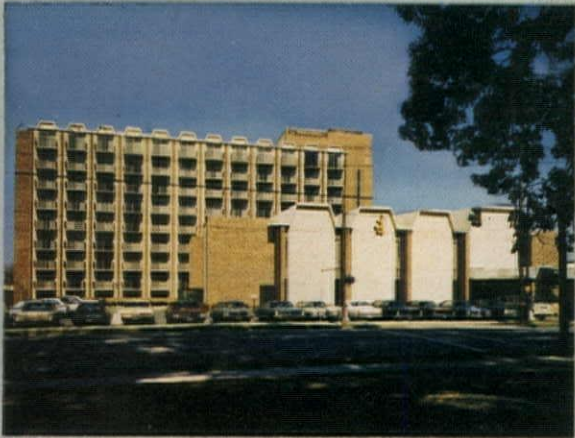


## Coordinates delivery

in housing developments. Anacondability makes planning easier by providing you with one dependable source for all ACR tube, copper water tube, DWV, wrought copper and cast brass fittings, plus low pressure cast brass valves with both solder and threaded joints.

It works to coordinate deliveries when you want them, where you want them. Got a tight schedule to meet? Talk it over with your Anaconda representative. You'll find him eager to help.





Courtesy Statler Hilton Inn, Greensboro, N. C.

## Saves space

in hotels, hospitals, institutional buildings. Anacondability offers copper runouts that can save space and costs by installing easily in 12-inch chases. This represents a savings of 6-inches in chase width ordinarily required by galvanized pipe and fittings . . . that's 48 cubic feet in an average size room!

You can credit Anaconda's slim fittings and superior corrosion resistance in copper metals for making this savings possible as well as practicable.

## Speeds installations

in high-rise buildings. Anaconda's broad range of copper tube sizes permits on-the-job preassembly of complete water supply trees without delay or wasted man-hours. In a typical back-to-back installation, for example, trees with 146 pre-assembled joints installed with just 4 solder joints! Added advantages: Copper's easy bending clears obstructions without costly modifications or space-consuming partitions.

Considering copper's many inherent properties and characteristics, *Installed* cost of copper plumbing including DWV can often compete in price with ordinary ferrous types. For further information concerning Anaconda pipe, tube and fittings, for the building construction industry, write for Publication B-1. Anaconda American Brass Company, 414 Meadow Street, Waterbury, Connecticut 06720.

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**Feature new ideas** with an island sink cabinet surfaced with FORMICA® brand laminate in Cortena Pecan 421. Countertop in Avocado 942 color-matched to wall cabinets; resists stains, scratches.

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## EDITORIAL

*Money, money, money—again*

## How to get pension funds into housing: Change just one definition in the Internal Revenue Code

In the present climate of tight money, and amidst the general groaning that a credit squeeze always produces, Congressman Dick Hanna (D., Calif.) offers a ray of hope. Last month he introduced a bill that may do more to bring pension funds into mortgages than any other plan yet. His bill is called "Amendment of Internal Revenue Code of 1954, Section 856(a) to Permit Master Trusts for Pension Funds to Qualify as Real Estate Investment Trusts" (REITS). That's a mouthful, but it's really a simple plan.

Section 856 now says REITS can enjoy tax-exempt status only if there are 100 or more actual owners of the trust. At present any REIT owned by a pension fund could not qualify for tax-exempt status because it would have only one actual owner—the pension fund. The Hanna bill

would permit the members of the pension fund to be counted as the owners of the REIT. Such a REIT might then be very attractive to pension-fund trustees because mortgage yields are substantially higher than other security investments of comparable quality.

Behind the Hanna bill is the Carpenters' Pension Trust Fund of Northern California, which now has \$44 million in California mortgages. The fund's trustees find the yields most attractive, and they point out that putting their money into the mortgage market helps create new jobs for the very people the fund was established to serve.

Now is the time for everyone in the housing industry to push hard for the Hanna bill. It just might be the biggest boon to mortgage financing we've ever had.

## The song of the cuckoo: industrialization vs. housing

We have expounded from time to time on industrialization and housing, and here we go again. It seems that every time we turn around these days we hear the housing industry roundly accused of being a backward nineteenth century phenomenon that missed the Industrial Revolution by a few light years. Our critics compare us to the automobile industry, or the missile industry, and find us myopic, invidious, intractable, inefficient, and generally scruffy.

In fact, these critics have a whole bit, a regular *shtick*, on this subject. They get up in front of an audience, massage their jowls for a bit and then start burping up phrases like "computer capability," "parametrical flexibility," "managerial inputs," "instantaneous data retrieval" and a lot of other jazz. All of this is intended to leave housing thoroughly chastised, with mud all over its bib overalls.

What starts the critics off is usually the high price of good housing. They ignore two very basic truths:

1. As consumers demand a higher level of amenities (environment, size, decor, appliances and assorted goodies), the opportunity to cut costs drops. Building the

shell of a house with mud block and prison labor won't cut the price to a buyer one nickel.

2. Housing's critics make no distinction between personal and real property. Automobiles, clothing, TV sets, etc., are all rapidly depreciating assets. When the consumer has used them up, they are worthless. Real property, on the other hand, generally appreciates—in good part because of its location. When the consumer has had his "use" of real property, it is still there, unique and reusable, with or without new improvements.

For that reason, the tenure, transfer, obligations and improvements of real property place it in an entirely different category from all other forms of property. This is why housing and building are more regulated than any other industry. Zoning, codes, development standards, subdivision regulations and mortgage-lending and foreclosure laws all influence what, where and how we build, and what it costs.

It's time our critics learned the difference between real and personal property. —RICHARD W. O'NEILL





Lush vistas like the one at left are beginning to appear in more and more housing projects. The reason: Builders and developers are finding that . . .

# golf sells houses

During 1967 some ten million otherwise normal people swung, flubbed and blasphemed their way through more than 190 million rounds of golf. And the ranks of divot diggers are growing at the rate of 7% a year.

Obviously this is great news for golf-equipment manufacturers (1967 sales: \$140 million) and for golf-course architects and contractors (664 courses were built last year, twice as many as in 1966).

It is also—with reservations—great news for the home-building industry. A large, rapidly increasing proportion of those new courses is being built as part of new housing communities. And sales records show that membership in a next-door golf club, plus the esthetic appeal of from 100 to 200 acres of beautifully manicured land winding through the project, has enormous buyer appeal.

But the reservations are important. Not all developers have projects or markets big enough to justify a golf course. And those who do still must face some rough financial facts:

*Golf courses are expensive to build.* While the cost can vary from \$200,000 to \$2 million, it's a rare developer

who has spent less than \$500,000 — in front money—by the time the first golfer tees off. And the 100-plus acres the course sits on

is land that would otherwise have been house lots.

*Golf courses are expensive to maintain.* Annual maintenance budgets can run from \$50,000 to well over \$100,000. And if quality has been cut to keep the original cost low, rebuilding will push the budget higher.

*Golf courses are not—in themselves—big profit makers.* Handled right, they can operate comfortably in the black once they're established. But there are many better investments for a developer's vitally needed capital.

*Nevertheless, a good golf course that is well integrated into a project can justify all its costs.* Not only is it an increasingly strong sales feature, it can be the marketing core around which a community is built.

From the point of view of the game itself, golf courses are properly the province of the golf-course architect, and their operation and maintenance should be in the hands of professionals. But there are many areas of design and financing that the developer must understand thoroughly, and the most important of these areas are the subject of the next 12 pages. You'll find 1) case studies of three developers who have turned golf into highly successful sales tools, 2) tips from a golf-course architect on integrating courses and house lots and 3) a scrapbook of golf-course miscellany that could save you many thousands of dollars.

continued



## Golf courses: In this luxury project golf gave buyers a reason to move way out of town

Deerwood is a 900-acre community some 12 miles south of Jacksonville, Fla. Even today, this is well beyond the city's home-building fringe; in 1961, when development began, it was considered the boon-docks. Yet current lot sales stand at 100 (price range: \$7,000 to over \$15,000), 55 houses are occupied or under construction (price range: \$40,000 to over \$100,000), and lot sales are rolling along at a comfortable four a month.

It would be only partly accurate to say that Deerwood is a success because of its golf course; the real reason is the imaginative way Bryant Skinner, president of Deerwood, used the course as a sales tool.

"When you're way out of town—and most new golf-course projects are—you need *people*," says Skinner. "You need them to play the course so it starts returning on its investment. And you need them as traffic which will eventually produce homebuyers. So a golf course must be part of a program that brings in people—and the right people for the project."

A step-by-step analysis of his program turns up a number of all-important principles for developing a golf-oriented, luxury community.

*People may not want to live way out of town, but they'll come to play golf.*

"There were already several good clubs near Jacksonville," says Skinner, "and we knew that many of our potential buyers belonged to them. So we set out to get them to join Deerwood as a second club, figuring that if they liked the course they'd play it more and more often, and eventually make it their first club."

Skinner built an excellent course (the Greater Jacksonville Open has been

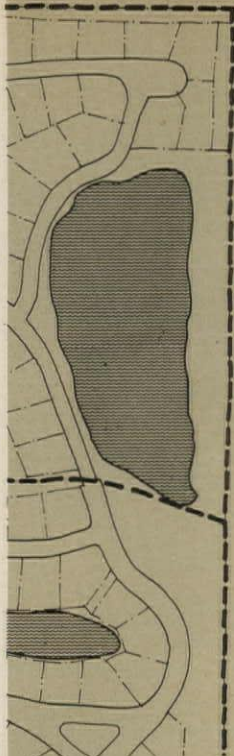
played there for the past two years) and an attractive clubhouse, and by 1963, when Deerwood's first lots went on sale, the club had 300 members. Significantly, about two-thirds of current lot sales have been made to those original 300.

*The right program builds up a large volume of play quickly.* This produces a large pool of potential buyers, and it also puts the course itself on an early break-even basis.

The key to early volume, says Skinner, is reasonable membership fees.

"The wrong way would have been to charge a high initiation fee to pay off the cost of the course immediately. We might have found 100 people to pay \$6,000 each to join; that would have covered most of the course construction and the clubhouse. But 100 members wouldn't play enough to maintain the course; and since we wouldn't own the club, we'd have lost control of our most important sales tool."

So Skinner set up a no-equity initiation



Land plan of Deerwood's first phase shows how lots are sited in relation to the golf course and also gives a picture of how lot values are affected by their location. The first section has 14 lots overlooking one fairway; the average lot price in the section was \$9,250. The second section has ten lots overlooking one fairway, plus 16 lots with long vistas over several fairways and lakes (*photo, right*); the average price was \$9,800. The third section has only four golf-course lots; its average lot price: \$8,153. Shown at the bottom of the plan is the next section under development. It will have a high percentage of vista lots.

Deerwood's golf course was designed by George Cobb.



fee of \$250. "By the time our membership reached 300," he says, "the volume of play was carrying much of our \$65,000 annual maintenance costs and our \$35,000 financing costs. Now, with a membership of about 600, we're past the break-even point."

Obviously, such a program means the developer must be able to wait to recover the capital cost of building the golf course through lot sales.

"We already owned the land outright," says Skinner, "so we only had to borrow to build the course. If a developer had to borrow for the land too, I'd say a joint venture with a money partner would be the best answer."

*A golf course can justify the early overhead of a project.* "From the moment it begins," says Skinner, "a new development has big overhead—an office, secretaries, insurance, etc., as well as key executives. And it may be a couple of years before lot sales can produce any income. But if that same staff can spend some of

its time creating a golf club which can be operating within a year, a lot of the overhead will go into a sound investment."

*A golf club can serve as the cornerstone for a broad recreation program.* And such a program can greatly enhance the appeal of a luxury project.

"The golf course must come first," says Skinner. "Golf is the most popular type of recreation, it does the most to raise the value of surrounding lots, and it gives the greatest feeling of permanence to the project. But once golf is established, you can really branch out."

Deerwood now has swimming, tennis and riding clubs, and a skeet club is planned for the future. And while basic club membership (at \$150 a year) is a requirement for anyone buying a house, beyond that a member pays only for the sport he prefers.

Here's how the fees work:

A club member can use any of the facilities on a one-time fee basis whenever he wishes. If he uses one or more

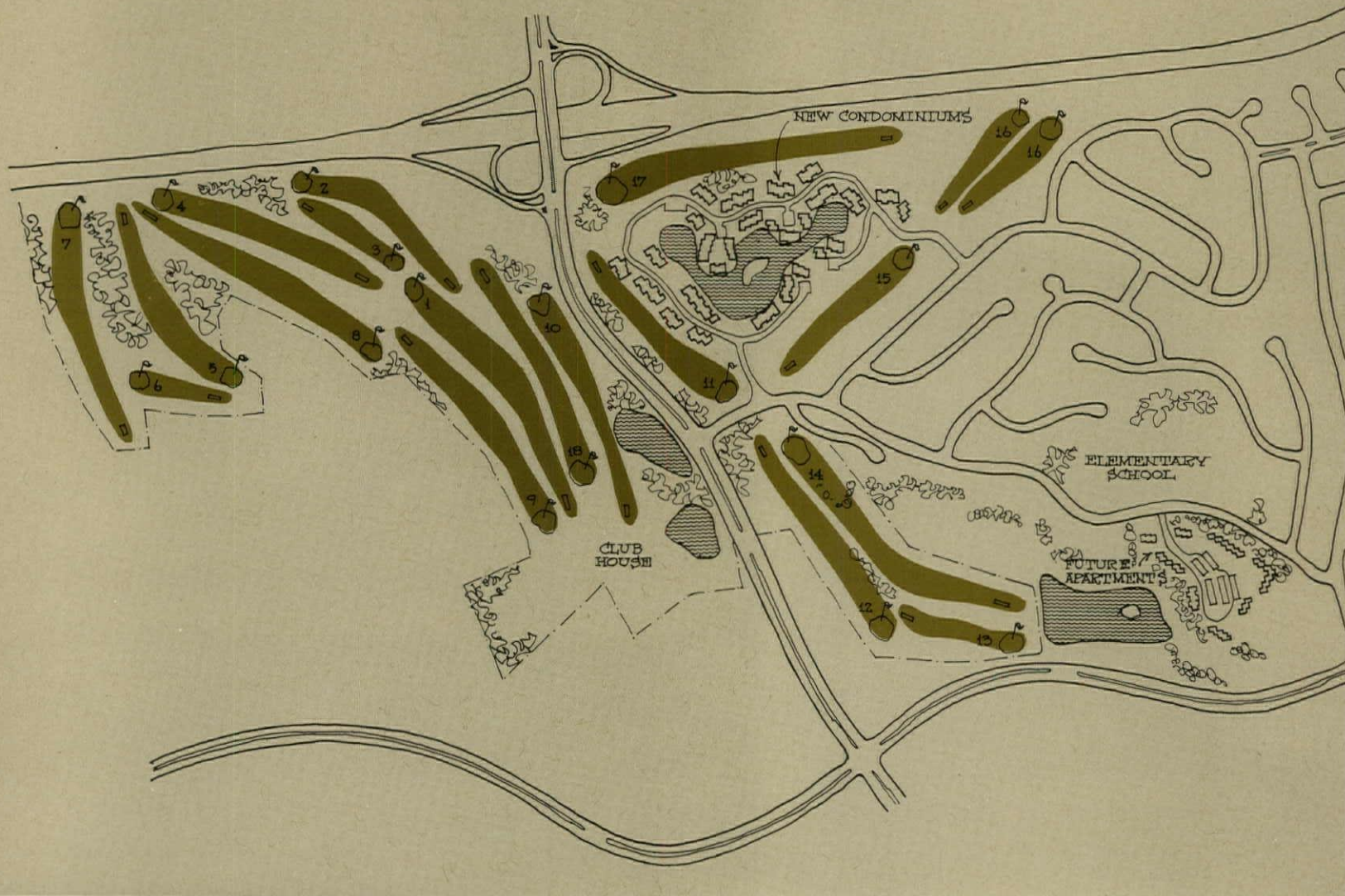
facilities often, he can pay for each on a monthly basis: \$27.50 for golf, \$10 for riding and \$5 for tennis or swimming.

But, warns Skinner, it's not enough just to provide these facilities. "Teaching programs are fundamental to all facilities, and so is competition—tournaments, horse shows, swimming meets, etc. This keeps up interest, and the more interest there is, the more members will want to move into the community."

This last point also underlines the importance of the developer's owning the club rather than selling it to members immediately via high initiation fees. By keeping control of it, he can be sure of the quality of all recreation programs. And he is also in a position to keep all physical areas—particularly the golf course—in first-class condition.

"When the project is sold out, a developer can then sell his club to the members," says Skinner. "But if it's showing a reasonable profit—and it should be—he can keep it as an investment."

*continued*



## Golf courses:

In this big project golf gives buyers with modest incomes a feeling of country-club living

Mission Viejo will eventually be an 11,000-acre new town in Orange County 25 miles south of Los Angeles. Today, four years into its first construction phase, it is a community of 2,200 homes priced as low as \$19,000 (the average is about \$25,000) and—among other features—a \$1.5 million golf course.

That is a lot of money—particularly front money—to sink into golf for a moderate-priced community. The course has produced no membership fees (it is a public course); it is not now being played enough to break even, much less make money; and so far not a square foot of premium acreage along the golf course

has been sold. Yet, in the opinion of Philip Reilly, president of the Mission Viejo Co., the course has already justified its existence.

"When we started Mission Viejo," says Reilly, "there was nothing else out this far. We felt we needed to give people a reason to come down here, and we also wanted to give them the feeling that this community was here to stay. So we decided to build a golf course—and one that people would talk about."

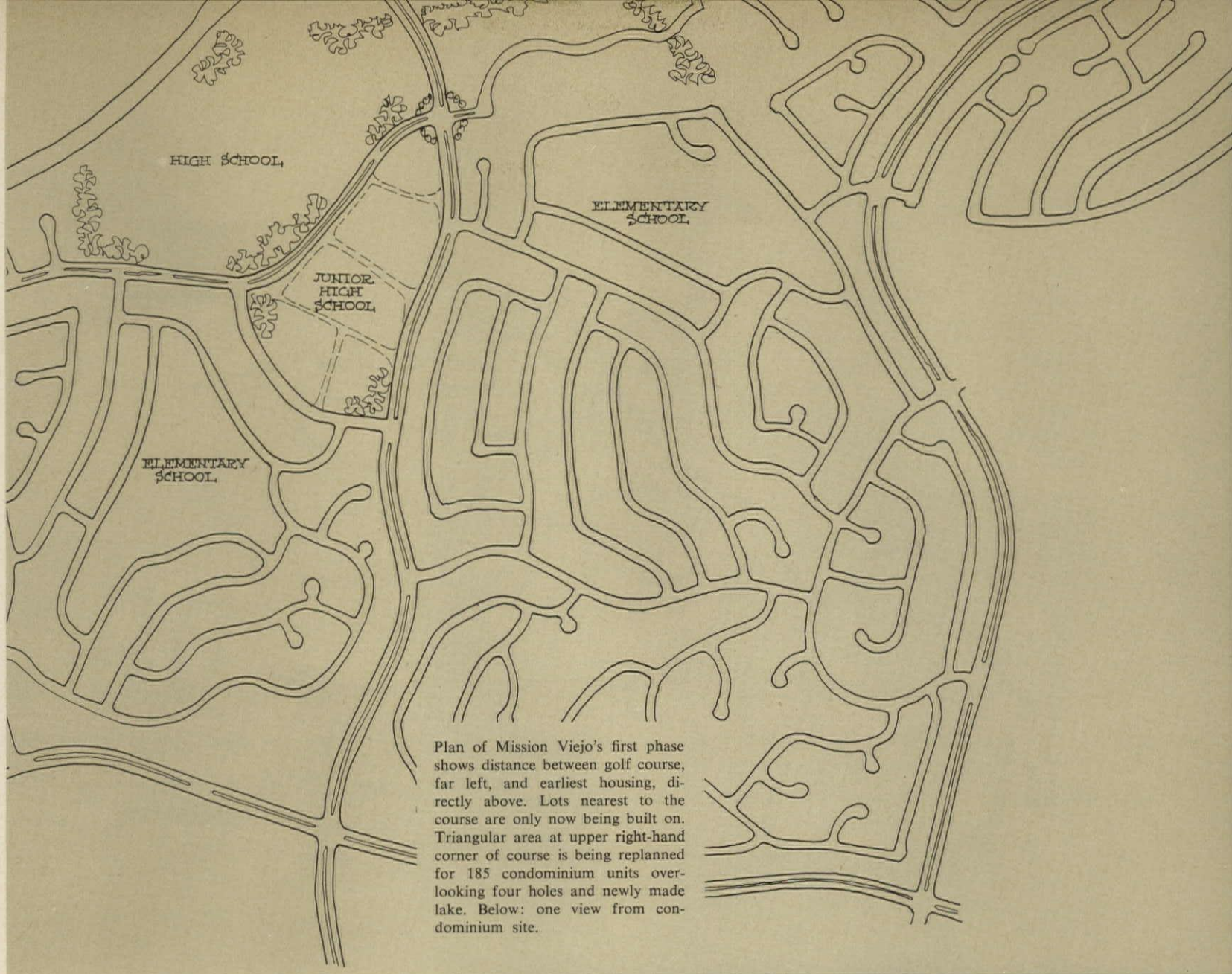
The course was designed by a widely known golf-course architect—Robert Trent Jones. It was made a public rather than a private course. ("We didn't want snob appeal," says Reilly. "We wanted a course everyone could play.") It was sited with one side on the San Diego Freeway. ("Not ideal from the developing point of view," says Reilly, "because it cut down the frontage we could eventually get on the course. But from a merchandising angle, it is highly noticeable to people driving by.") And roads were laid out so that

people driving to the course have to pass through much of the project to get there.

"Now look what we can offer," says Reilly. "The owner of a \$19,000 house can take a three-minute drive and play a top golf course for just greens fees. And his wife can go up to the club and eat in an excellent restaurant. It makes people feel they live in a much nicer area than they really can afford."

The fact that Mission Viejo's course is currently losing money causes no concern because it was expected. Says Reilly: "We planned on running in the red for at least two years after the course was opened—and that was a year ago in March. Besides, we didn't put the course in to make money. We put it in to help sell houses and to make Mission Viejo a better community for the people who live there."

Reilly estimates that once the course reaches a volume of about 210 rounds a day, it will show an annual profit of something like \$100,000.



Plan of Mission Viejo's first phase shows distance between golf course, far left, and earliest housing, directly above. Lots nearest to the course are only now being built on. Triangular area at upper right-hand corner of course is being replanned for 185 condominium units overlooking four holes and newly made lake. Below: one view from condominium site.

"But we're a ways away from that now," he adds. "One reason is that it's a very tough course, and it takes about five hours to play. But the toughness is one of the things that attract people."

(Nevertheless, some steps are being taken to speed up play. Part of the course is being redesigned to accommodate adjacent housing, and in the process, a par-3 hole that has been a bottleneck is being doubled so two groups can play at once.)

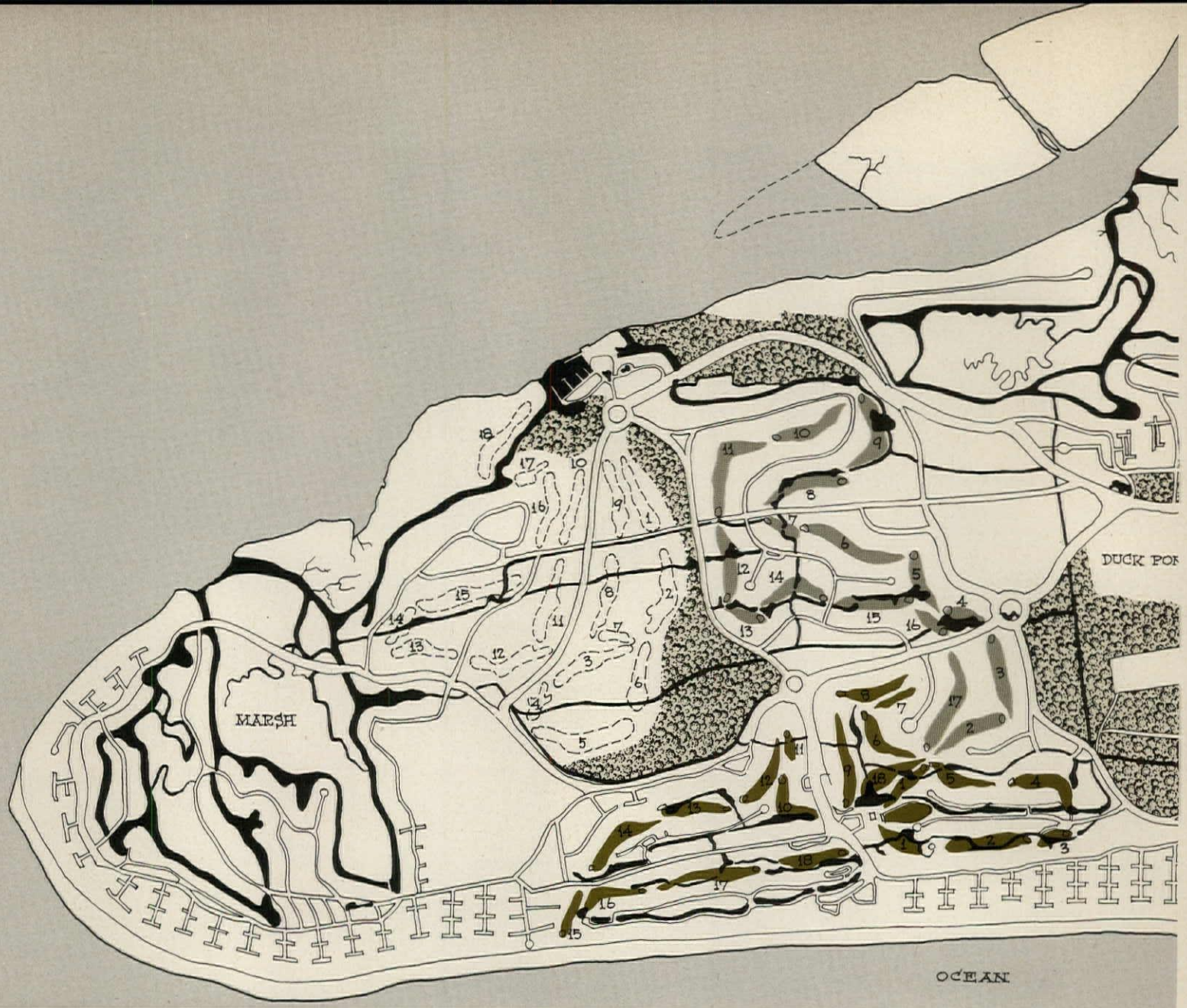
At present Mission Viejo's golf course is beyond the area of developed lots (the cover photo shows the nearest houses). But this situation is about to change. Plans have been completed for 185 condominium units to be built around one portion of the course; they will sell in the upper-\$30,000 bracket. And other housing will be built later.

"All told," says Reilly, "the golf course will appreciate the value of about 300 surrounding acres. When we sell them, we believe we will recoup a good portion of the course's original cost."



Julius Shulman

*continued*



**Golf courses:**  
 In this resort project  
 golf gives vacationers  
 a year-round reason  
 for buying houses

Sea Pines Plantation is a 5,200-acre ocean resort on the tip of Hilton Head Island, S.C. When completed, it will have from 2,000 to 3,000 homes owned by retirees and vacationers—most of them in the over-\$20,000 salary bracket. And its history provides graphic proof of golf's importance in today's recreation picture.

"When we opened in 1957," says Charles Fraser, president of the Sea Pines Co., "we didn't know how important golf was to our market. We thought that swimming and hunting and fishing would be enough to get us started. We'd planned for a course later, but we were going to do it in nine-hole stages."

Fraser's investors persuaded him that golf was more important than that, and in 1960 an 18-hole course was finished.

"Until then," says Vice President John Smith, "we'd made almost no sales. When the course opened and we had completed an inn where golfers could stay, we really started to sell."

In 1967 a second 18-hole course was opened; a third is now under construction and should be finished in 1969 ("We could use it right now," says Smith); and a fourth is envisioned for 1972.

So eventually about 90% of Sea Pines's land and more than \$2 million of its money will be invested in golf. In the company's view, this investment is entirely justified. Here's why:

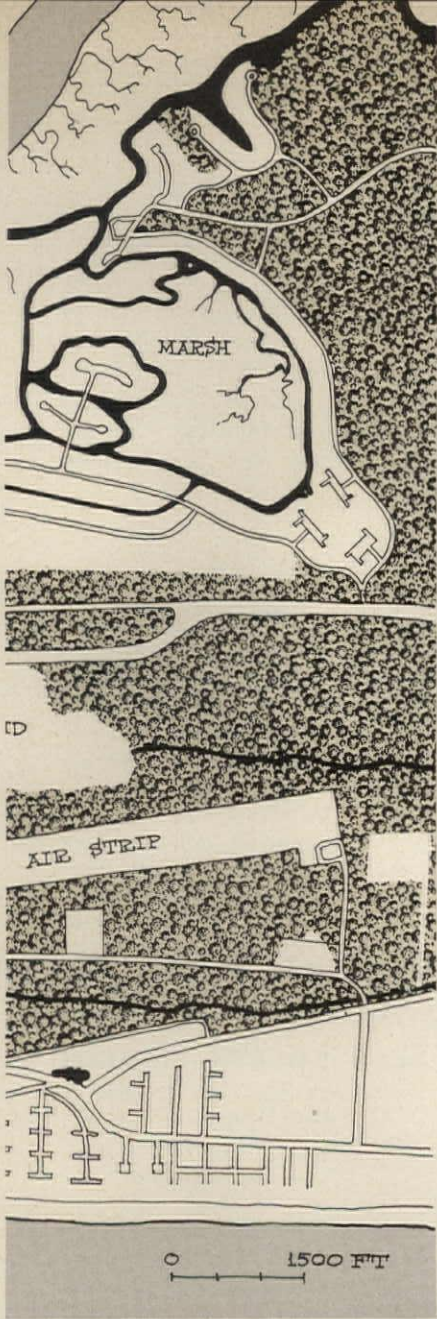
*The majority of potential buyers are golfers.* Says Fraser: "Statistics show that among high-income retired people, one third are golfers and another third own clubs, which means they're at least planning to play."

*Golf is a year-round attraction at Sea*

*Pines.* Says Smith: "Without our golf course, we'd have only a relatively short beach season to attract buyers. But golf goes on all the time. We recently had a freak four-inch snowfall; by afternoon it had melted, and people were playing."

*Golf brings in potential buyers.* About 175 rounds a day are played on each of Sea Pines's courses, and only about 25% are played by residents. The rest are vacationers who are being exposed to the appeals of the resort.

*Golf courses create premium lots.* "In fact," says Smith, "thanks to the courses, we don't have any non-premium lots. They are all beach lots, lots with water views, or fairway lots." Sea Pines's newest courses are bordered by about 250 lots each—an unusually high number made possible by an unusually high proportion of single fairways. Heavy trees and careful fairway layout protect the fairway lots from errant golf balls. ("We took one lot off the market," says Fraser, "because too many balls landed on it.")



Land plan (left) shows first course (dark green) and second course (light green), plus site of course now under construction. First two courses are served by a single clubhouse (photo, above); third course will have its own club. Note the wide separation of many of the fairways, particularly on the latest two courses, permitting lots on both sides of the fairway. This practice is increasingly frowned on by golf-course architects and developers because of the danger of flying golf balls, but Sea Pines's heavy foliage (photos at right and below), plus wide fairways and deep setbacks, have obviated the problem. Fairway lots are priced from \$8,500 to \$15,000.

First two courses were designed by George Cobb; third is by Joseph Dye and Jack Nicklaus.



Photos: Frederick C. Baldwin

## Golf courses:

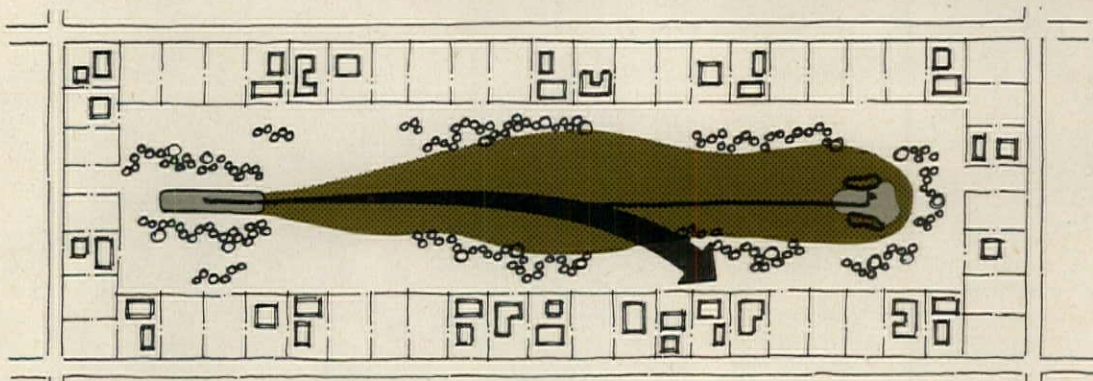
Here's how to avoid common mistakes in the integration of houses and golf course

The drawings and precepts below and on the following five pages are by Desmond Muirhead of Los Angeles, who is considered by many experts the most imaginative golf-course architect practicing today. Muirhead is a comparative newcomer to his field. Until 1963 his design work was mostly in city planning and landscape architecture; since then, in association with Gene Sarazen, he has designed 40 courses around the country and is currently working on 15

more (including four for Arvida Corp. in Boca Raton, Fla.).

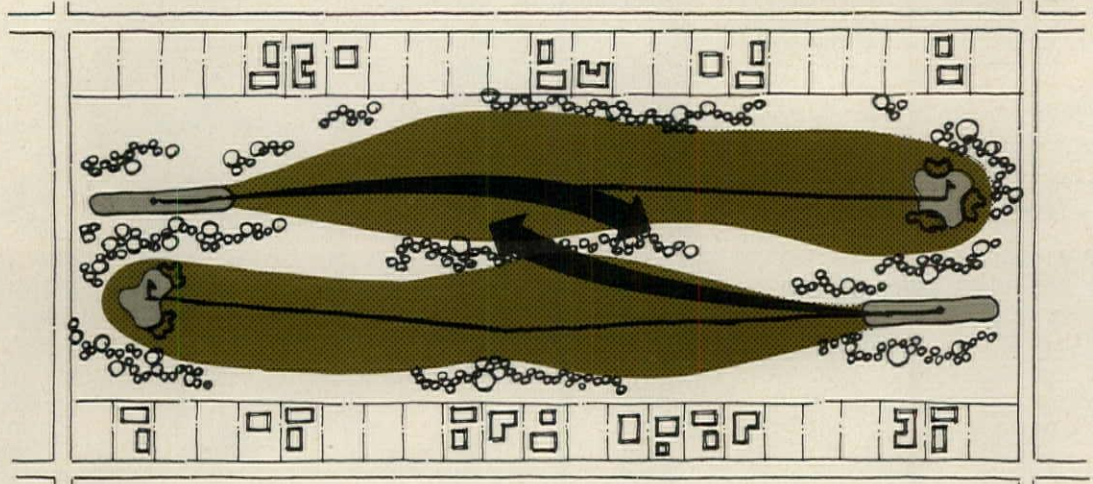
Most of Muirhead's recent clients have been land developers, and his success in this area stems chiefly from his recognition of the interdependence of golf and housing. "Nothing must detract from the course's appeal to the golfer," he says. "At the same time, the course's main function is to help sell houses. The trick is to balance these two factors."

### SINGLE FAIRWAYS ARE AN EXPENSIVE WAY TO GET FRONTAGE



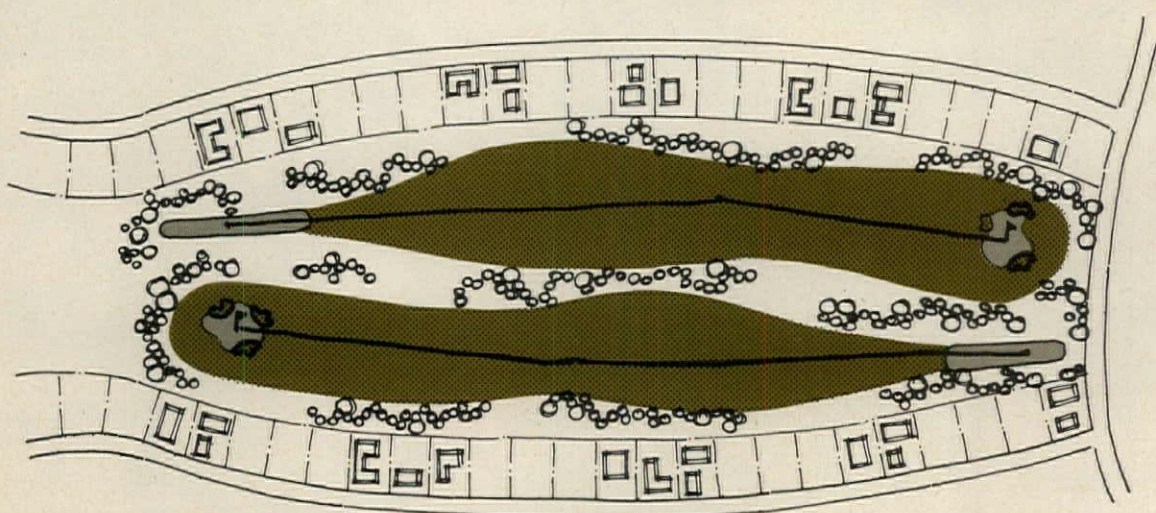
They permit the maximum number of fairway lots. But, says Muirhead, single fairways also present the greatest danger of golf balls flying into people's back yards. So for safety's sake, single fairways should be at least 100 yds. wide in the landing area—which extends from 150 to 250 yds. from the tee. This width can be reduced if there are plenty of trees in the landing area.

### DOUBLE FAIRWAYS REQUIRE LESS SAFETY MARGIN



They are laid out so that a sliced drive from either tee will go into the adjacent fairway. ("There are ten slices for every hook," says Muirhead, "and slices tend to fly higher and stray farther.") As a result, the combined width of the two landing areas need only be 150 yds. The double fairway thus eats up 25% less land, and requires 25% less maintenance. And since a ball sliced into another fairway is easier to find than one sliced into a border area or house lot, play is speeded up.

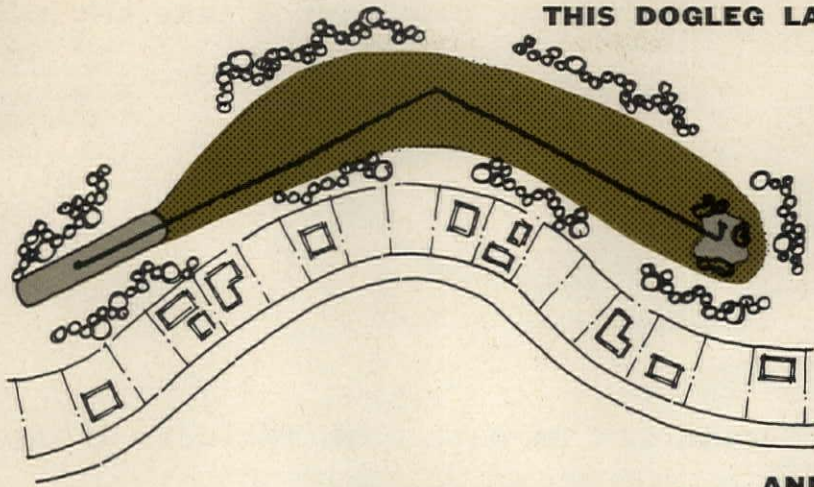
### AND A CURVED BUILDING LINE SAVES EVEN MORE LAND



Here's a good example of the need for coordinating course and housing. Tees and greens need less of a buffer zone around them than does the landing area, and the combined tee and green area at either end of this double fairway can be as narrow as 100 yds. If the adjacent building land and streets can be curved to fit this pattern, the result will be a further saving of land, a deeper cut in maintenance costs and, from the housing point of view, a more interesting subdivision.

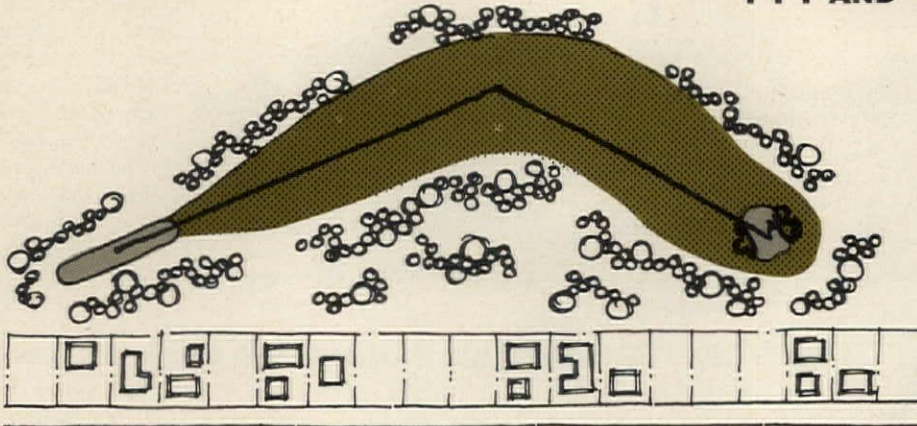


**THIS DOGLEG LAYOUT IS DANGEROUS . . .**



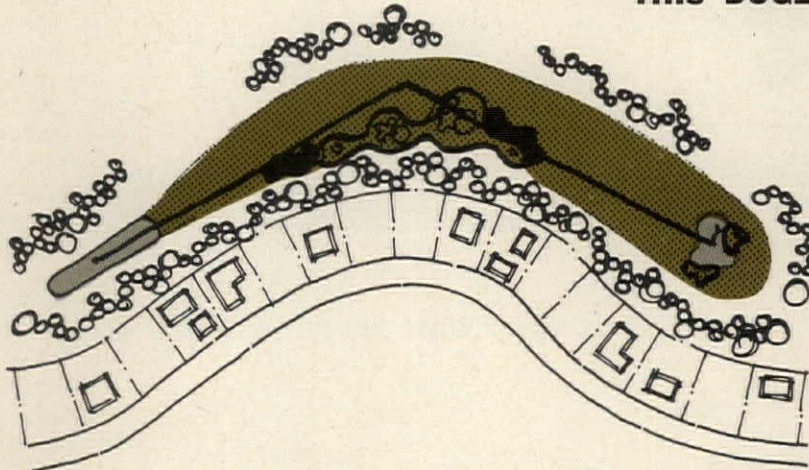
"Golfers always take the short route on a dogleg," says Muirhead, "and they'll try to drive over a greenhouse if it will give them a shorter second shot." On this hole, seven or eight lots are in the danger zone. "In a situation like this," adds Muirhead, "some houses have received as many as 1,000 golf balls per annum."

**. . . AND THIS ONE WASTES LAND**



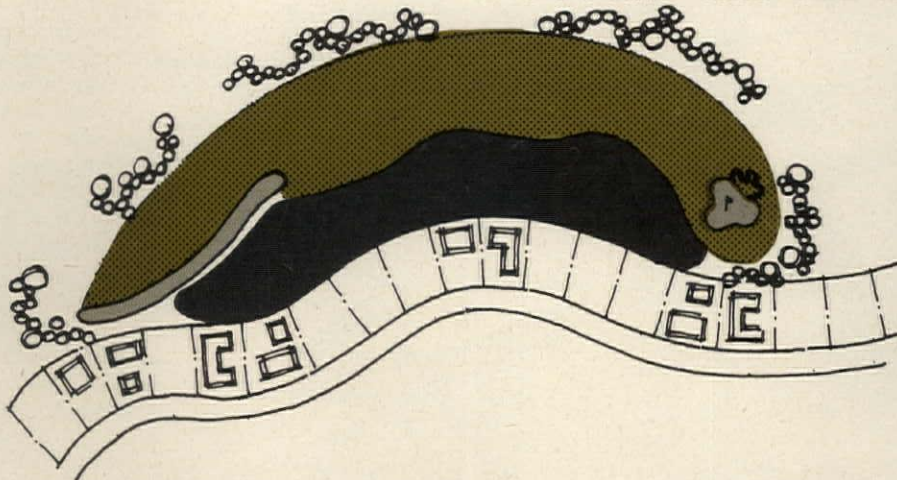
Houses near this hole are relatively safe from bombardment, and they have a very nice view. But the developer has lost a big chunk of land—enough for a half dozen or so lots. And unless the wasted area is carefully manicured—which means extra maintenance—it is an area where lots of golf balls could be lost.

**THIS DOGLEG PLAN IS BETTER . . .**



Golfers will think twice before they cut this corner. Trees are planted all along the lot lines, including the area next to the tee. And traps and water hazards are placed on the right-hand side of the land area. Result: The golfer who tries to go the short way is almost sure to get in trouble.

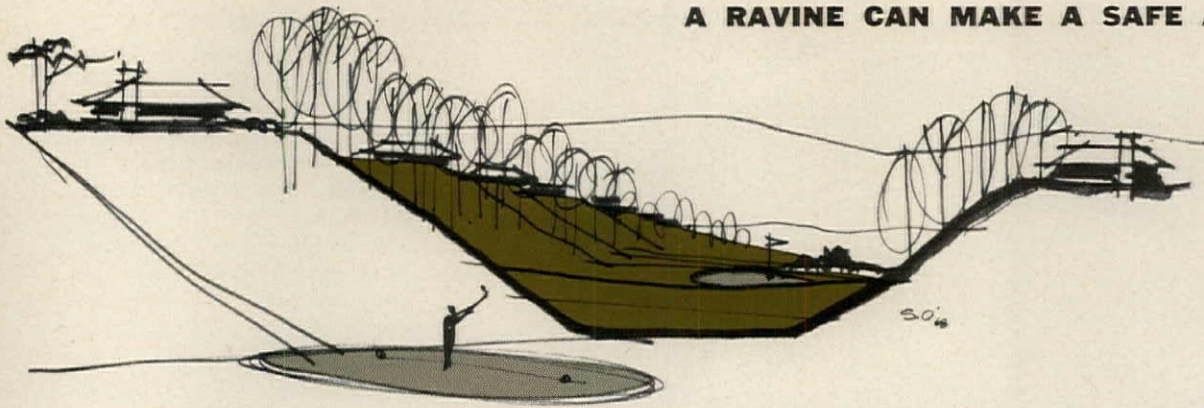
**. . . AND THIS ONE IS SAFE AND BEAUTIFUL**



Here a lake has been built on the inside of the dogleg. This protects the houses; the golfer is forced to keep his drive away from them. It makes a challenging hole; the closer the drive to the water, the shorter the second shot. And it creates premium, high-priced lots—for houses, townhouses or apartments—which command a view of both fairway and water.

*continued*

### A RAVINE CAN MAKE A SAFE AND BEAUTIFUL HOLE



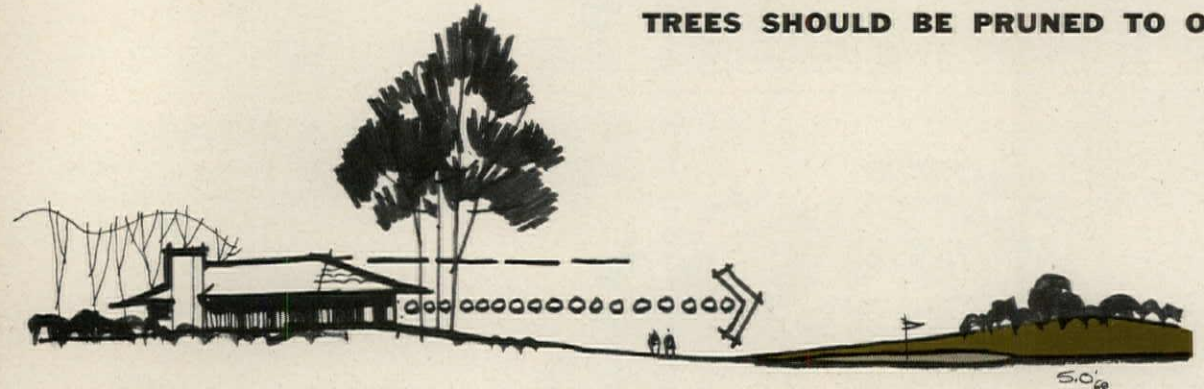
And this is especially true, says Muirhead, if the sides of the ravine are wooded. The fairway will be esthetically satisfying to the golfer, while the ravine sides and the trees force him to stay in the middle. Houses can be on the high ground on either side of the fairway, and the height will add to their safety.

### GRADING CAN IMPROVE BOTH THE COURSE AND HOUSE SITES



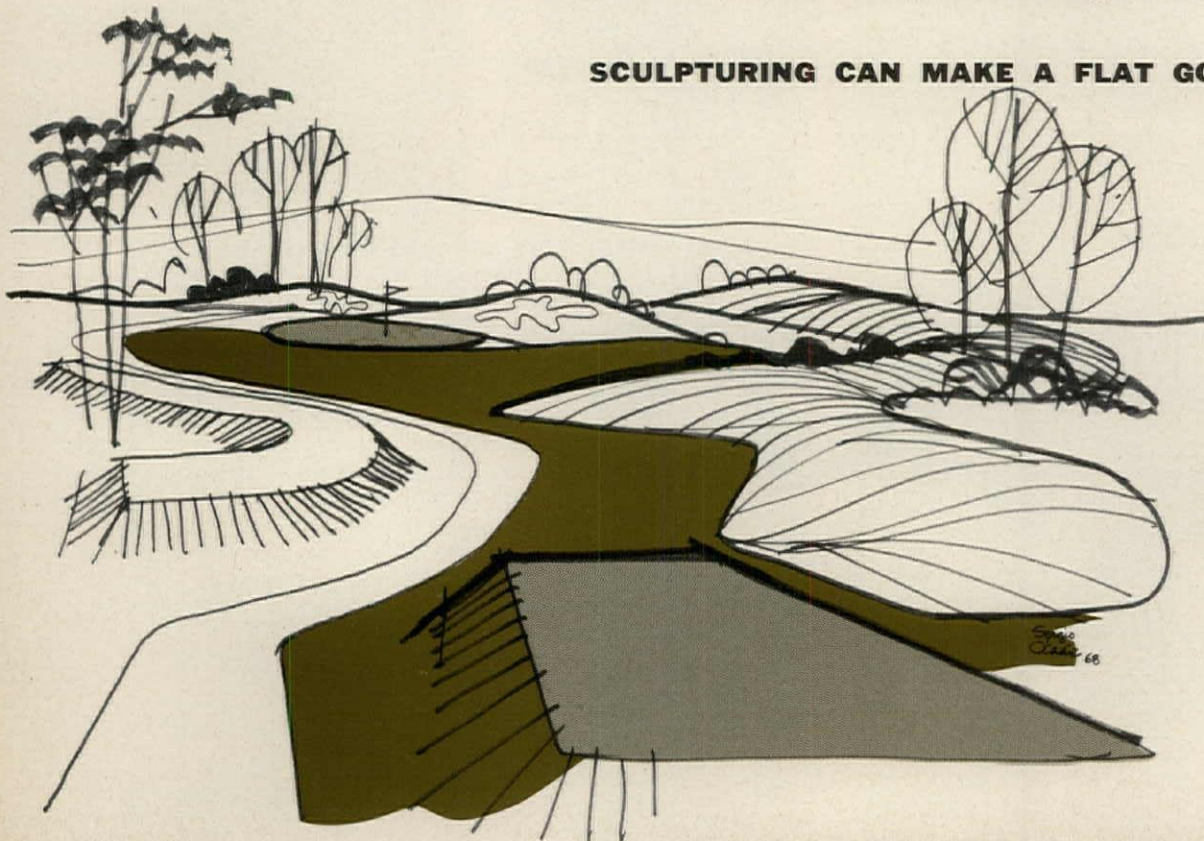
A light cut-and-fill operation (*upper drawing*) will produce gently rolling land that is far more pleasing to the golfer than billiard-table terrain. And the high ground makes more desirable house lots. If the cut-and-fill is more severe (*lower drawing*), lakes can be created which make more interesting golf holes and greatly increase lot values.

### TREES SHOULD BE PRUNED TO OPEN FAIRWAY VISTAS



If the lower branches of trees standing between houses and fairways are removed to a height of 10' to 15', residents will have an unobstructed view of the course. At the same time, the remaining upper branches will stop errant golf balls. Removing undergrowth in front of the house also increases the view of the course. No safety problem is involved, since rolling golf balls are seldom dangerous.

### SCULPTURING CAN MAKE A FLAT GOLF COURSE EXCITING



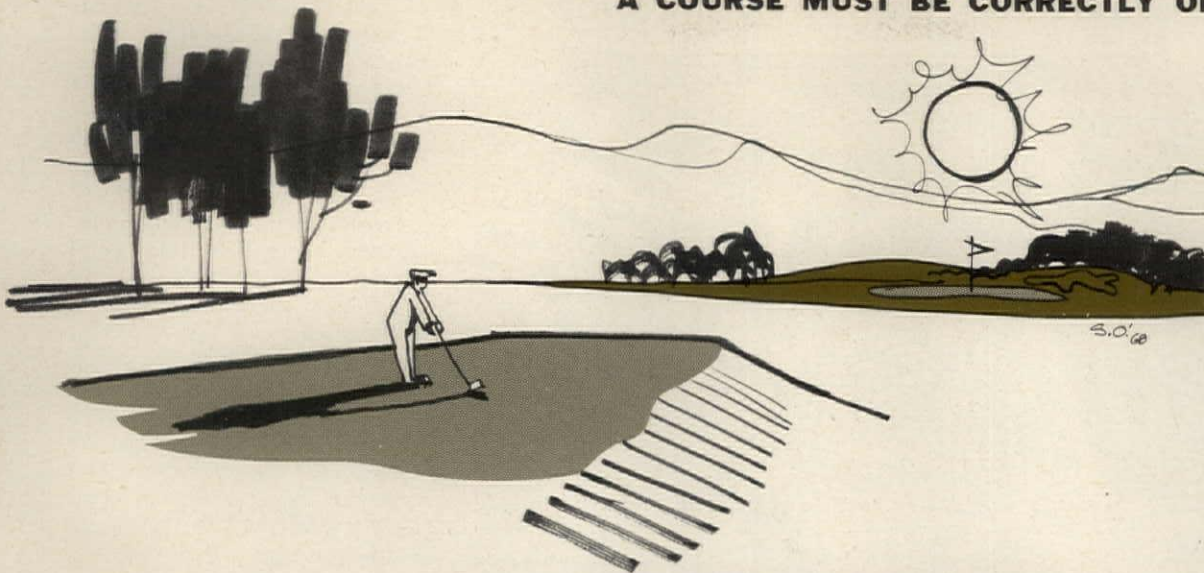
Rough grading, as noted above, can create large-scale rolls; sculpturing is the small-scale grading that gives the course its texture.

"There are many three dimensional elements of a course," says Muirhead; "cart paths, tees, mounds, trees, greens, etc. All of them should be woven into the design of a hole."

Fine sculpturing is not inexpensive; it requires a grading tractor handled by an expert, and can cost from \$10,000 to \$20,000 for an entire course. But, says Muirhead, "it can be the thing that turns an ordinary course into a beautiful one."

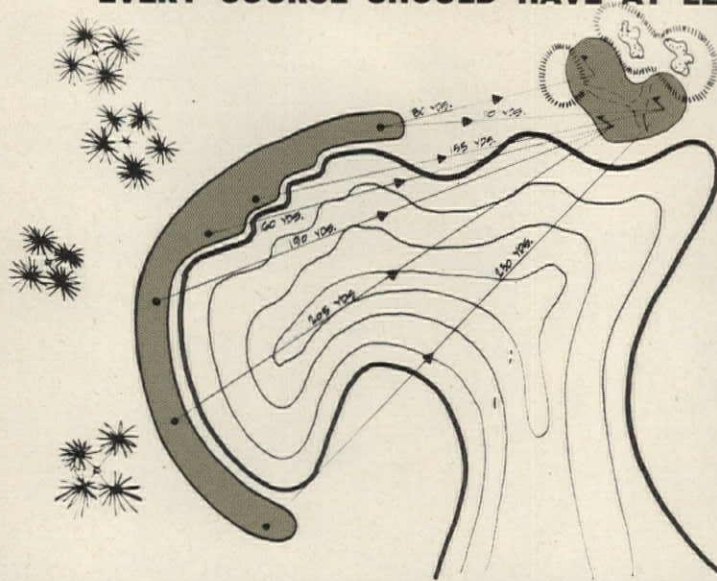
The drawing at left is Muirhead's sculpture sketch of the fourth hole at Soboba Springs, Calif.

## A COURSE MUST BE CORRECTLY ORIENTED TO THE SUN



No golfer wants to tee off into a blazing sunset; he loses the flight of the ball, and often the ball itself. So a course should always be planned, says Muirhead, so that no fairway aims west into the setting sun. Sunrise is not as much of a problem; while many golfers play into the dark of the evening, relatively few are on the course when the sun first comes up. The best thing, obviously, is to run as many holes as possible north and south.

## EVERY COURSE SHOULD HAVE AT LEAST ONE GREAT HOLE



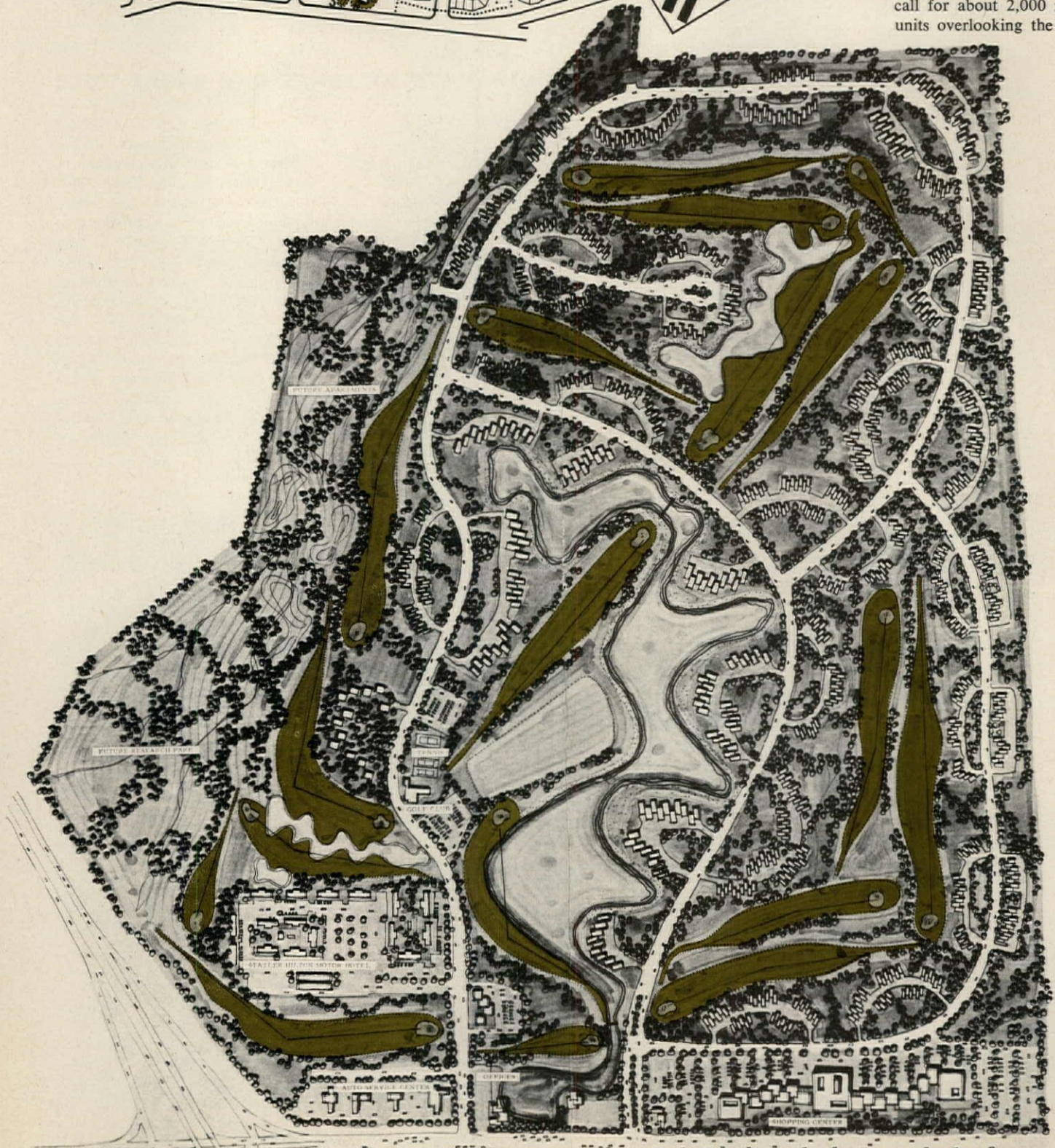
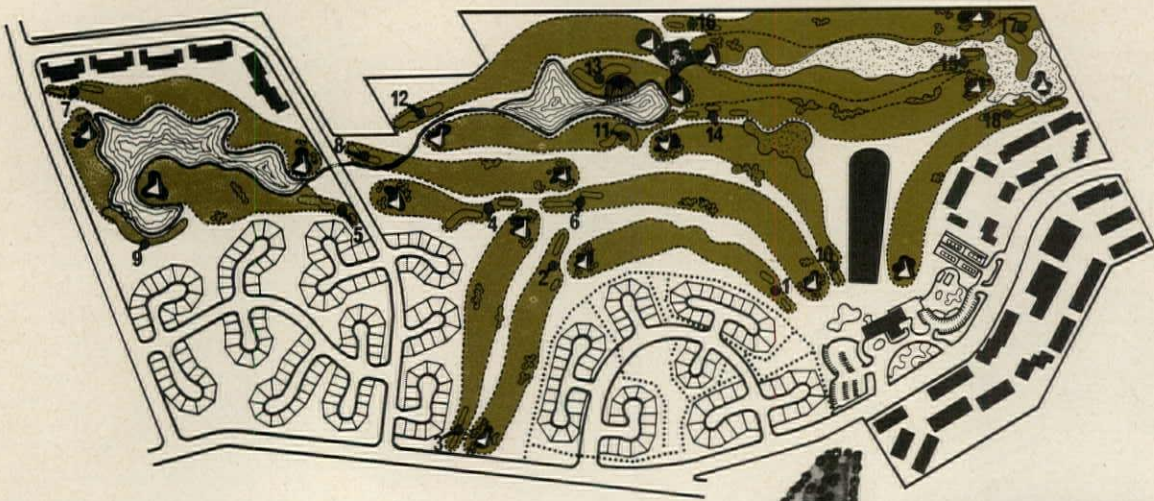
This one, the par-3 sixth at Soboba Springs, is Muirhead's favorite and most famous—it has been published in a number of magazines, including *Sports Illustrated*. As a piece of the scenery (photo, below), it is gorgeous; as a golf hole, it ranges all the way from heaven to hell. Played from one end of the long, curving tee (drawing, left), it demands a wickedly accurate 220-yd. drive over water to the green; from the other end, it is a dry-land, short-iron hole that the worst duffer should par occasionally. And in between these extremes, a golfer can select his own degree of difficulty.



**THESE COURSES ILLUSTRATE TWO VERY DIFFERENT WAYS TO MIX GOLF AND HOUSING**

Both were designed by Muirhead, and that's where their similarity ends. Soboba Springs (*left*) is a self-contained course; fairways are grouped together, and except for two holes, the course does not penetrate into lot areas. Says Muirhead: "The relation between homes and fairways is made by the greenbelt areas that run from the course back into the clusters."

On the other hand, Bay Meadows (*below*), soon to be built in Jacksonville, is designed for maximum frontage, with fairways run singly and in pairs. Present plans call for about 2,000 multifamily units overlooking the course.



## Golf courses:

Finally, here are answers to some key questions about golf-course development

First and foremost, the course is an integral feature of the housing project, so it must appeal to golfers and non-golfers alike.

"This means it must be beautiful," says Muirhead. "It should be a well-maintained green area that everyone in the project can relate to."

Second, it should work with surrounding houses. This means getting as much lot frontage on the course as possible without 1) cramping the course, which golfers won't like, or 2) making the houses targets for golf balls, which residents won't like.

Third, the developer should build a course that will make a name for itself—hence a name for the project. And this leads the developer to his first major decision:

### What kind of course is best for a housing project?

Broadly speaking, the developer has three choices: 1) a championship course (usually 6,500 yards or more and tough), 2) a so-called executive course (usually around 5,500 yards and easier to play) and 3) what Muirhead calls a so-so course—somewhere between the other two.

Muirhead's choice, assuming that enough acreage is available, is the championship course.

"It will do the most to promote the project," he says. "The average golfer likes a challenge, and he is beginning to know the difference between a good course and a mediocre one. Also, he'll talk more about a good, challenging course."

If the project is to have a second course, Muirhead recommends an executive course. It should have a few challenging holes, but otherwise be designed to play as quickly as possible so a maximum number of rounds can be played per day.

"Lots of people are just learning to play," says Muirhead, "and many women and older people don't have the time, the desire or the legs to play a full course."

Muirhead himself prefers to design what he calls "the adaptable course." Such a course can play at championship length and difficulty, but varied tee placements also permit shorter, easier play. (The hole shown on page 73 is a good example.)

### Should a championship course be designed to play fast?

Not in Muirhead's opinion. "For one thing, a fast course is necessarily a less hazardous course; it won't get a good reputation. And more play doesn't necessarily mean more income. If you put 400 people through per day rather than 200, the course will wear out faster. And it will get bashed up more and require extra maintenance. So it's usually better to build a slower, more challenging course and charge more per round. This should also raise the value of the surrounding land."

### What kind of course is best for a low-priced project?

There are usually two limitations in such a market: Buyers can't afford high greens fees, and the developer can't afford to put as much land into the course.

"In this case," says Muirhead, "the course must be designed for maximum play if it is to break even. I would keep the length down to 6,200 yards or so, which takes up less land and cuts down maintenance. I'd ease off on traps. And since a lot of time can be wasted on greens, I'd back them [tilt them towards the tee] and make them softer, so approach shots will hold better.

"But I'd also give the course three or four really great holes to lift it out of the ordinary class."

### What kind of course is best for a retirement project?

Muirhead designed a course for Rossmore Leisure World in Maryland that he believes embodies a successful formula.

"We made a survey and found that retirees wanted a course that was sporting, not bland, but which had hazards within the limits of their game."

So Muirhead laid out a 5,500-yard course with each hole adapted to the 150- to 175-yard hitter. "Surprisingly," he says, "really good golfers like it too."

### How can unnecessarily slow play be avoided?

Muirhead offers this list of principles:

*Have at least three starting holes*—holes with tees near the clubhouse and starting shack. This puts more players on the course early in the day.

*Make the starting holes long.* Short par 4s or par 3s in the first two or three holes slow up play badly.

*Avoid long walks between green and tee.* They destroy the rhythm of the game and slow it down, and they encourage people to

stop and talk between holes. ("On some courses," says Muirhead, "golfers can literally get lost between greens and tees.")

*Avoid steep terrain.* It forces people to walk the course more slowly.

*Avoid deep rough.* It's an invitation to lost golf balls and subsequent play-stopping searches.

*Don't over-trap.* Muirhead considers two to four traps per hole a good average; more will slow things up. And traps should be set at least 220 yards from the regular tee—out of reach of the duffer but in play for the good golfer.

### Just how much should a golf course cost?

There can be no clear-cut answer to this question, says Muirhead. Every course has its own particular topography, soil and drainage characteristics. And the developer can build either a Volkswagen or a Rolls Royce of a course.

As a rough yardstick, Muirhead offers the following cost estimate, made for a Florida course which can be said to fall midway between a VW and a Rolls:

Clearing: \$10,000.

Grading and shaping: \$181,500. This includes cutting and filling (\$150,000), replacing topsoil (\$17,500) and fine shaping of tees, greens and mounds (\$14,000).

Irrigation: \$188,000. This includes pumps (\$8,000) and a fully automatic sprinkler system (\$180,000). The latter could be reduced to about \$110,000 with a single-row automatic system, or \$70,000 with a quick-coupling system.

Greens: \$70,000. This is based on greens averaging 8,000 sq. ft. and a cost of about 50¢ a sq. ft.

Preparing fairways: \$43,000.

Miscellaneous (traps, cart paths, trees, etc.): \$34,680.

Total: \$527,680.

To this must be added the cost of equipment—golf carts, etc. (at Mission Viejo such equipment came to about \$150,000). And it does not include a clubhouse, which can be as expensive as the developer's golf budget will allow.

"In my opinion," says Muirhead, "too many builders start with too much clubhouse. I'd rather start with, say, a \$30,000 club that can be expanded, and put any extra money into the course."

### What are the best sources of golf-course information?

The United States Golf Association, 40 East 38th St., New York, N.Y.; and the National Golf Foundation, Merchandise Mart, Chicago, Ill.

—MAXWELL C. HUNTOON JR.



## The problem: Slum housing breeds men without skills

People know all about that now. They can hardly ignore the publicity:

President Johnson is calling for billions to rebuild the nation's slums. Governor Rockefeller is calling for billions to rebuild New York's slums. Three-dozen big corporations have teamed up in a giant rehab task force to start cleaning up Pittsburgh. Other manufacturers are bankrolling rehab demonstrations in other cities.

But still the people in the slums riot. And still their children like the one at the left haven't a ghost of a chance at learning a skill or of even being interested in learning a skill. Why? Because the work hasn't really started yet. The promising-looking projects that get praised in the newspapers turn out to be demonstrations meant to encourage someone else to pick up the ball.

And indeed, even when the work does get started in earnest, will it upgrade the slum people, or only their houses? Surely the federal government's fascination with instant-fixup technologies and the trade unions' insistence that slum work stick to the rule book are not geared to upgrading the people.

**SLUM CHILD** named Brad idles away a morning among back-alley garbage cans in Cleveland.



## A solution: Slum rehab gives jobless men a trade

Slum neighborhoods are filled with able-bodied men who have no skills because they spent their youth like the child on the opposite page. Would it take them long to learn the trades necessary to rebuild dilapidated ghetto housing?

Trade unions say yes: They prescribe the usual lengthy apprenticeship at trainee wages.

But the slum-rehab specialist holding the blueprints at the left says no. He claims that an unskilled man with sufficient aptitude can be turned into a rehab carpenter in a fraction of the time that unions insist on. He puts non-skilled ghetto residents on his jobs as laborers and helps them move into specialties.

Urban rehab means more than just a paycheck to these men, says the specialist: "We have less vandalism on our jobs than some of the richest neighborhoods in the city. That's because neighborhood people are involved in these jobs. And the jobs are giving them a new philosophy of life: Get off welfare and earn some money."

*To see how this kind of rehab works—and to see the roadblocks it runs into—turn the page.*

**SLUM REHAB SPECIALIST** Nathan Beavers briefs a newly organized Cleveland work crew.



**JOB TRAINING** in Cleveland's Hough section is done informally in the course of work. Unlike the conventional apprenticeship system, which imposes a standard-length learning period on all novices, Hough trainees are moved from the laborer level into specialized trades as rapidly as they are able to learn. Hough rehab specialist Nathan Beavers concedes that classroom training would help the process, but it is virtually impossible to set up government-funded vocational schooling without conforming to union rules.



**NEW MATERIALS** like plastic piping help beginners master a trade by simplifying tough rehab jobs. Example: Plastic plumbing joints can be fitted together in tight spaces because they are bonded with cement rather than lead or solder which require extra space for heating tools.

## 'A lot of our men

So says rehab specialist Nathan Beavers, who draws his labor from the very ghetto he is rebuilding. In the five months since he started working in Cleveland's blighted Hough district, Beavers has provided at least part-time income for some 120 neighborhood families.

"We don't have enough work yet to support that many people full time," he says, "so we rotate the men to give everybody at least a couple of day's pay a week."

Beavers set up his own rehab contracting company—Namax Builders Inc.—less than a year ago. Now he has 180 Cleveland apartment units on his books and is also organizing rehab subcontracting crews in Pittsburgh and Detroit.

Like most Negro rehab contractors, Beavers is undercapitalized. Namax—named for Nathan and Maxine, the builder's wife—was founded on a shoestring and Beavers' desire to put his college education to better use than as another builder's employee.

But Beavers has moved ahead fast for two reasons:

1. He is backed by a manufacturer—U.S. Gypsum Co.—which chose him as general contractor for 54 apartments rehabbed as a turnkey project under FHA 221d3. And he won drywall, carpentry and common-labor bids for adjacent projects.

2. He breaks some of organized labor's most sacred rules.

### Unskilled workmen are turned into rehab specialists overnight

"We have no official apprenticeship system here," says Beavers. "We move laborers up to carpenter's helper and to carpenter as fast as we can."

In fact, Beavers doesn't seek conventional tradesmen: "A union carpenter brought up in new construction is no better equipped for rehab work than a raw man. This work requires its own breed of specialists, and it doesn't take six years of apprenticeship to learn."

Beavers simplifies training by capitalizing on methods that simplify work. Examples: His use of 1) a trowel-on compound for leveling floors without the use of shims and sleepers, 2) prefabricated partitions for erect-



**FIVE-DAY SCHOOL** for aluminum-siding mechanics transformed eight unskilled residents of



Chicago's Lawndale ghetto into employed tradesmen. Training was financed by manufacturers.



## never did much before except shoot dice on the corner'

ing interior walls without building framing and attaching drywall, 3) color-pigmented plaster to eliminate wall painting and 4) plastic pipe for more complete subassembly and easier snaking of plumbing through old walls.

"We can train a laborer to set up our pre-fab partitions in two hours," says Beavers. "He can learn faster than a veteran carpenter because he isn't set in his ways and has no old work habits to overcome."

Local union agents took a dim view of this informal approach to job training. They threatened to close down Beavers' jobs until he finally signed a contract with the carpenters' union.

He won an important concession on job training, however: Beavers agreed to unionize his men—but the union agreed to waive its apprenticeship requirement.

A look at general union policy shows how significant a concession this is.

### **Trade unionists say there is only one way to learn: apprenticeship**

AFL-CIO President George Meany is a staunch advocate of the system: "There is no other way to bring people into the skilled unions, and there is no shortcut."

Other trade-union men at the national level voice more lenient views about helping ghetto residents find jobs. But their good intentions always stumble over the question of training. For example, this three-part proposal by President C. J. Haggerty of the AFL-CIO Building and Construction Trades Dept. virtually contradicts itself:

1. "I believe that, as practical men, our local unions should consider accepting into membership those persons residing in the area [ghetto neighborhood] who are qualified as journeymen and who desire to work in that capacity in one of our trades."

2. "I further believe that our local unions, where possible, should institute learner or trainee programs for those youths in the area who show an interest and an aptitude for building and construction work."

3. "At the same time, however, we should insist that a full journeyman crew be maintained to insure that the projects are built

and rehabilitated according to specification and delivered in the shortest possible time."

In practice, the trade unions throw an effective roadblock in the path of developing ghetto labor. Until they relax their apprenticeship rules and actually do set up faster trainee programs, they will keep on asking men at poverty level to work for years as apprentices at less than laborers' wages. And since destitute neighborhoods contain few qualified journeymen, unions will have to insist that rehab work be done by "qualified" men from outside the slums.

Is Nathan Beavers' approach to job training valid? Apparently so. In Chicago, for example, a group of manufacturers has already demonstrated that unskilled ghetto residents can become tradesmen in five days. They sponsored a training course for aluminum-siding mechanics and tried it out on eight young men from the city's riot-prone Lawndale district.

The trainees spent one day in a workshop-classroom and four days on a re-siding job. Then they were hired as helpers by local siding contractors at daily wages of from \$18 to \$25. At last report, almost a year later, six were still working at the trade and earning more than \$200 a week as full-fledged applicators.

The Chicago program was set up in cooperation with a local anti-poverty agency, Tri-Faith Employment Project, and financed by The Aluminum Assn., The Aluminum Siding Assn. and NERSICA (National Established Repair, Service and Improvement Contractors Assn.). Trainees were given \$50 and a complete set of handtools on graduation day.

Unlike traditional apprentice training, the siding-mechanics course got right to the point. Ignoring nonessentials like blueprint reading and other skills that overlap the work of different trades, it dealt solely with cutting, fitting, trimming and installing aluminum siding.

Other job-training proposals are easier for union men to swallow. But they make so many concessions to the unions that they barely improve on the apprentice system. For instance: The AFL-CIO Building and Con-

struction Trades Dept. has tentatively okayed a program suggested by Pittsburgh's new 38-company rehab task force, the Allegheny Housing Rehabilitation Corp. (p. 81).

The program would involve 66 weeks of classroom and on-site training, at the end of which the union might hire the men either as apprentices or journeymen. The union would have to approve of the trainee applicants, however. And it would not fund the program. Several nonprofit foundations are being asked to share its cost.

Besides finding ways to open construction jobs to slum dwellers, rehab specialists need a source of management talent.

### **Few men in construction work know how to run any phase of slum rehab**

The management shortage includes all levels from foreman to planner. And Nathan Beavers' problem is particularly acute.

"We just can't find administrative people," he says. "At least 85% of the high school graduates available to us can't read or add figures above grade-school level. And the kind of foremen we need have to be personnel relations experts instead of just clipboard men."

"I'll give you an example of what a foreman on one of our jobs is up against. We know the most economical way to schedule this work is to keep all buildings in the same construction stage—gut them all at one time, then rough in all heating and windows, etc. But after we got started, we found that we had to take one of the buildings out of sequence and start putting in the windows ahead of schedule. Why? To boost the men's morale. They couldn't see any signs of progress and were getting discouraged. Putting in the windows made it look like we were accomplishing something."

At higher levels, much more sophisticated techniques are being applied to rehab. Systems management, for example, is being tried out on Baltimore slums by the Advanced Systems Division of Westinghouse Corp. under a \$450,000 federal grant.

Why is rehab work so hard to manage? Because there are still no rules, no standards, and even no definitions.

*continued*



**SINGLE-FAMILY HOUSE** is one of ten being renovated in Columbus, Ohio, by National Gyp-



sum Co. The work is being done for less than \$7.00 a sq. ft. to permit \$12,000 resale prices.



**ROWHOUSES** in Lancaster, Pa., provide Armstrong Cork Co. with a proving ground for re-

hab-oriented building products. Like other manufacturers, Armstrong sets its own rehab standards.



**SLUM APARTMENTS** in Cleveland involve heavy stripping and cleaning work. Rehab costs—while



considerably less than total clearance plus new construction—range from \$10 to \$15 a sq. ft.

## 'Rehabilitation—

So says Associate Director Frank Montero of Community Improvement Corp. of Manhattan, which has been rehabbing New York City tenements. Montero explains:

"The cost of rehabilitation at a scale which does not require massive relocation will range anywhere from 75% to 100% of new semi-fireproof construction."

Other rehab advocates are more optimistic. Says U.S. Gypsum, which is pioneering projects in New York City, Chicago, Detroit and Cleveland: "Building rehabilitation costs approximately one-third less than a neighborhood clearance project."

### Rehab comes in so many forms that rules of thumb are not always valid

The work ranges from rundown single-family houses in still respectable neighborhoods to festering tenements in hardcore slums. One can be restored by fixup work for \$5 a sq. ft.; the other must be gutted and rebuilt at costs as high as \$15 a sq. ft.

U.S. Gypsum has specialized in restoring multistory masonry tenements for rent-subsidized tenants under the management of nonprofit organizations. But National Gypsum Co. is exploring the market potential for single-family-house rehab.

Specifically, National G is trying to show that rundown houses can be fixed up and sold for \$12,000 or less at profits attractive to private builders, remodelers and investors. FHA 220-R financing provides 25-year mortgages for monthly payments of \$75 to \$85, so the houses are feasible for families with \$5,000 to \$6,000 incomes.

National Gypsum's houses are not in hardcore slum areas. And the company—in partnership with a builder and a real estate broker in Columbus—has kept acquisition costs down and avoided relocation problems by concentrating on vacant houses. Renovation costs have ranged from \$4.83 to \$6.65 a sq. ft. for work that includes new heating systems, kitchens, bathrooms, wiring and plumbing—yet permits salvage wherever possible. Examples: An existing bathtub was cleaned up and reused, and windows were reglazed rather than replaced.

Another manufacturer, Armstrong Cork

## a very loosely defined term—is not necessarily a shortcut'

Co., is specializing in rowhouses. Armstrong got its feet wet last year with a three-apartment Philadelphia rowhouse (H&H, June '67), is now working on seven single-family rowhouses in its home town, Lancaster, Pa.

Armstrong's approach emphasizes building products as a key to standardizing rehab. Says the company's urban-rehab director, F. S. Donnelly Jr.: "We intend to incorporate as many Armstrong flooring and building products as possible in our current project. We're considering a whole spectrum of exterior improvements." For interiors, Donnelly has proposed easier-to-install floor coverings and a wall system that incorporates framing and decorative surface in one unit.

But Armstrong's innovations won't necessarily pass local approval.

### Rehab standards depend on who's judging the work and who's buying

Workmanship that one builder or manufacturer may consider ideal for rehab may be unacceptable to a local building inspector. For example, suspended ceilings with panels laid in grids are frowned on by many urban-rehab inspectors because they provide easy hiding places for drugs and guns. Yet the same inspectors will permit unlevelled floors and poorly patched walls in rehab work.

FHA has no real standards for rehabilitation work. Its "Minimum Property Standards for Urban Renewal Rehabilitation" is actually a guide for setting up local standards. Exact levels of rehab quality are based on residents' incomes, neighborhood living standards and marketability of the renovated property. The only mandatory requirements involve health, safety and structural soundness.

So each manufacturer is free to promote his own standards of workmanship and environment in renovated housing. One faction is protesting because low-income housing is not being air-conditioned. Says an *Air Conditioning, Heating & Refrigeration News* editorial: "All major riots in the past few years have occurred when there were fairly extended spells of hot, humid days and nights. We hold to a sincere belief that air-conditioned living for low-cost-housing

dwellers could help much in relieving social tensions in crowded metropolitan areas, and thus help to avert the explosive outbreaks that are so costly in terms of human life and property."

### Rehab resists estimating formulas and standard work classifications

No cost or construction manuals exist for the would-be rehab specialist. Each builder makes his own rules, and the main one is be flexible.

Nathan Beavers is developing a documented cost comparison to show that wholesale

gutting of an apartment building is cheaper than trying to work with salvaged walls. But it won't necessarily apply to all his jobs.

"This is a play-it-by-ear business," Beavers says. "It needs its own kind of specialists with new job definitions. It needs drywall specialists who go over old walls for thickness to decide what length nails to use and whether screws would be better. It needs flooring specialists who can repair broken and warped subflooring piecemeal. And it needs framing specialists who know how to brace old walls in dozens of different ways—and still stick to the architect's plans."

### 'Money alone is not the answer to urban rehab'

So says Executive Director Bernard Loshbough of ACTION-Housing Inc., whose efforts to make rehab materialize have culminated in a massive new limited-profit program financed by 38 Pittsburgh-based corporations. The companies set up a new corporation called Allegheny Housing Rehabilitation Corp. (AHRCO) which expects to generate operating capital of between \$3 and \$4 million so it can create about 1,000 rehabilitated housing units a year in the Pittsburgh area.

But the capital is not all that makes AHRCO a promising solution to urban rehab. Loshbough explains:

"If today private enterprise or government were to earmark a billion dollars for housing rehabilitation, the effective instruments would still not be immediately available to put it to the best use. Rather it is adequate financing, talent, technological skills, methodology, and administrative capability—combined—that are needed to save our cities by meeting the demands of this viable \$50 to \$75 billion market."

AHRCO plans a many-sided approach:

1. Bylaws require that six of the executive committee's 19 members be per-

sons who represent the interest of neighborhoods slated for renovating. Two current members, for example, are the local presidents of NAACP and the Urban League. All members have an equal vote and any action requires a two-thirds affirmative vote.

2. Housing will be acquired, renovated and re-sold by the corporation, and in some cases may be retained for long-term investment.

3. Unions have expressed support. Says President Anthony Furlan of the Pittsburgh AFL-CIO Building Trades Council: "There will be no discrimination. If a particular union will not work with minority groups, the contractor can man the job with non-union members of that craft."

4. Westinghouse Learning Corp. is preparing a job-training program that would help make use of unemployed and underemployed men in the construction work.

AHRCO also has the close cooperation of FHA, the City of Pittsburgh and the Urban Redevelopment Authority. Its first project, 66 units, is well under way and it has put down money on several others.



Bill Simpson Jr.

## The differences in tomorrow's housing market

The past few years have brought great changes in housing's customers and in the industry that has been built up to serve those buyers. The key to business success in the decade ahead will be the ability to understand these changes, to offer a product that meets new and different preferences, and to structure our businesses to adapt to ever-changing and more rigorous conditions.

Our customers' way of life, their family organization and size, their choices of ways to spend their leisure time, are all far different from those of similar families just a generation ago. The appeals of the traditional detached house, that miniature of the nobleman's manor on its own estate, are dwindling more rapidly than we realize. The appeal of recreation, either built in as part of the housing package or conveniently nearby, is a growing factor in housing buying and renting decisions. The appeal of common maintenance is a lot stronger to the young renter or buyer than it was to his grass-cutting, snow-

shoveling, house-painting parents a generation back.

The profile of our housing industry is changing just as rapidly as that of our customer. More and more, housing must be financed on the credit and business stability of the builder rather than on the credit and income of the homebuyer. The economic facts of life are making it difficult for the old-style, seat-of-the-pants builder to maintain his share of the market. He must compete against businessmen with management capability, tools of market research and analysis, financial backing, and a wealth of skills almost unknown a few years ago. From another quarter, huge corporations continue to probe for viable ways to enter the homebuilding field and to share in its growth.

To discuss these changes, and to predict what they might mean to all builders, HOUSE & HOME invited 28 leading builders and developers, manufacturers and market professionals to a two-day Round Table in Tampa. For the highlights of their discussion, begin opposite.

### Round Table

#### PARTICIPANTS

#### Building and developing

**Neil Bortz**  
Towne Properties  
Cincinnati

**Jack Bowles**  
Augusta, Ga.

**William Brosius**  
Frederick, Md.

**Charles Cheezem**  
St. Petersburg, Fla.

**Ernie Fritsche**  
Columbus, Ohio

**Richard Goodwin**  
Moorestown, N.J.

**Emil Hanslin**  
Waquoit, Mass.

**Harvey Huie**  
Dallas

**Matt Jetton**  
Sunstate Builders  
Tampa, Fla.

**John Koelemij**  
Tallahassee, Fla.

**Masud Mehran**  
Sunset Development  
Livermore, Calif.

**Harvey Meyerhoff**  
Baltimore, Md.

**Ouida Regan**  
Pensacola, Fla.

**Mandel Shimberg**  
Tampa, Fla.

**Clyde Smithwick**  
Pine Bluff, Ark.

**Tom Standard**  
Epitome Housing  
Macon Ga.

**Stanley Swartz**  
San Diego, Calif.

**Donald Tarinelli**  
Bridgeport, Conn.

**Edgar Teasley**  
HBA of Greenville  
Greenville, S.C.

**Chet Tomlin**  
H & M Construction Co.  
Winter Park, Fla.

#### Manufacturing

**Fred Barnet**  
Float-Away Door Co.  
Atlanta

**Alan Eggers**  
Thomas Industries  
Louisville, Ky.

**Harold Kranz**  
Macklanburg-Duncan  
Oklahoma City

**Jerry Nowak**  
Boise-Cascade Corp.  
Chamblee, Ga.

**Robert Ritchey**  
U.S. Steel Corp.  
Pittsburgh

**Jim Walter**  
Jim Walter Corp.  
Tampa, Fla.

**James Williams**  
Formica Corp.  
Cincinnati

#### Marketing

**William Smolkin**  
New Orleans

From House & Home Moderator: Richard W. O'Neill, editor

# 1 Leisure-oriented living is changing the kind of housing people prefer

*It's much more important that housing be planned for the environment that the younger generation will demand than to go on creating the environment that their parents wanted. Before we can offer what these buyers want, we will have to research what this really is.*

**Bill Brosius:** The new-house market has largely been what I call the "forced housing market". Most people are pushed into buying a house, for whatever reason: maybe they have got a better job, higher income, maybe their mother-in-law is moving in with them, or maybe the kids have gone off to school.

The question is: How can we get beyond the forced housing market? How can we improve our total volume by making people get so damn enthusiastic about what they see that they make up their own minds about buying a house, and don't get pushed into it?

We have to design a more urban environment with all of the amenities within it; perhaps a village concept, where there is a hardware store, a drug store, maybe a general merchandise store, and a church.

We are much more aware of what goes on around us than we were in the past generation. World War II created changes, but what changed more than anything else is the total immersion of people, particularly the younger people, in what is going on everywhere. They are now aware of a whole variety of environmental possibilities.

We have to think about the environment in the design within our houses and beyond our houses—out to the patio, up to the lot line, and beyond the lot line to the neighborhood and the total community environment.

Without this kind of approach we are just not going to break the barrier of forced housing and get into an expanding market.

What kind of character did the old neighborhood have that the new ones don't have? We need to discover that, and maybe expand and improve upon it so that the people will buy it.

**Neil Bortz:** If we don't design apartments and houses today that anticipate how people will live in the next ten or 20 years, all we are doing is building a quick in-and-out deal. Too many decisions have already been made like that. We have to address ourselves to creating a proper environment.

**Stan Swartz:** In building today you have to provide a complete community environment. There was a time when you could build a 30-unit apartment on a lot—and no more. The apartment

dweller today insists on a better environment for himself.

**Bud Meyerhoff:** Good design and environment are musts for a permanent realty investment today, especially now that environment partially can be "eyeball" rather than something that residents use all the time.

**Charlie Cheezem:** Well, we do know that a lot of people want single-family condominiums right now, where the builder takes over all the maintenance. Then they have the benefit of a detached house—no maintenance—but without the togetherness that you find in multifamily projects with communal pools and the like.

**Chet Tomlin:** Then, too, we are making a serious mistake in equating what our customers really want with what they take, simply because it is the only thing available to them.

We must devise ways to find out what kind of living our customers really want now and will want in ten years, so we as an industry can get ahead of their taste for once instead of being behind them.

**Ernie Fritsche:** We ought also to recognize that there is a long series of possible environmental attributes within any market; one is convenient transportation, another is privacy. One of our most successful developments has no swimming pool or clubhouse, but it is completely sound-conditioned.

**Ed Teasley:** I agree; too often we try to read into people's minds what we think they want, and need, instead of what they actually want.

**Fritsche:** How in the world do you get ahead of people today? We have spent thousands of dollars trying to find out. We have done it as scientifically as market analysis permits, but in the final analysis our sales records measured against our prognostications don't jibe. Now a lot of figures you get are useful, and you really can't get along without them, but people lie to you. They tell you what they like, but they don't buy what they like.

**Tomlin:** I don't think we can ever get ahead of taste, or the

real desires, of our consumers, but we make a serious mistake in reacting just to what we see them accept. That's what too many of us do today. We have got to look a lot further if we are going to survive for 30 years in projects like new communities. If we simply exploit the market as it stands today, we'll be in real trouble in ten years.

**Bortz:** When we went to the suburbs, we created neighborhoods that were terribly bland and unchallenging, and this is one of the things the present generation is revolting against. They have been stuck out in the suburbs, where they can go from one shopping center to another and not know a soul. They can pop in the car at 16 and be at the other end of town where nobody knows who they are before you know it. They can steal an apple or tell an old lady to go to hell, and their father isn't going to find out about it. I don't think they like this . . . there is a tremendous void. Location isn't just the availability of land; it is confined area that creates opportunities, activities and proximity.

**Meyerhoff:** The dwelling-unit basics underlying anything that we do in the next decade revolve around the family unit and its life-style. And what was popular ten years ago is not going to be popular ten years from now, except in very extraordinary circumstances.

**Swartz:** How are we going to pattern our merchandising and design for the future? I have a feeling that we are not going to be able to guess very far ahead.

**Emil Hanslin:** If you take a look at kids in school now, you see a definite rejection of the things we are currently merchandising in our new projects. I wonder how many of these kids are oriented toward old-fashioned conspicuous consumption. *Things* really don't seem to grab them—they are interested in ideas. They will have more time, and when they become oldsters their use of time and their creative urge will be different from ours. You find among them a great deal more of "let me do something myself about my residential environment." We may have to create an opportunity for them in the environment we provide, instead of all the eyeball stuff.

**Tomlin:** Emil's comments are extremely pertinent. Most of the kids that we contact would, ten to one, rather play mental than physical games. And this not only relates to the physical facilities that we will provide in this new market but also to how we talk to them or appeal to them when we talk housing.

**Hanslin:** We must cast our projects into a life-style. But are we smart enough to figure out how to merchandise something that doesn't have any precedents in merchandising? The big revolution is education, which has more to do with the life-style of housing than anything else. It's become almost a fact of life that we go to school all our lives.

**Tomlin:** Because this group is such a think group, it might be more interested in amenities that challenge the mind than in some of the amenities that we have offered. I don't believe that this affluent younger group wants total environment in one place. The environment they search for is broken into categories: recreation, leisure, entertainment and education.

**Bortz:** We are talking about people who are getting married much later in life, deferring children until much later and having fewer of them, making more money and being more mobile.

Add all these things together, and you are talking about townhouses and apartments. We have to provide better apartments and better townhouses.

**Bill Smolkin:** We have made an analysis of the incomes of young families, and the fact is that when you pass \$20,000 in the mortgage, you have shut out 80% of the households where the head of the household is under 35. How on earth can they cope with the high cost of housing and a relatively lower income? In Puerto Rico the FHA appraisal on a 4,000-sq.-ft. lot is roughly \$6,000. The best selling market price is \$16,000. Here is a country that is providing good FHA-insured housing priced at \$16,000 for people with a median income of \$7,000 or \$8,000.

Our problem is that we don't regard anything less than 10,000 sq. ft. as a lot, and don't regard anything less than 1,000 sq. ft. as a house. You can't build 2,000-sq.-ft. houses on 10,000-sq.-ft. lots and sell them for \$16,000.

**Harvey Huie:** These young people are living in apartments with all the amenities you can possibly give them today—and with none of the responsibilities other than the fact that they are supposed to pay the rent. Their life-style will challenge the single-family builder in the years ahead because they are getting things now that they didn't even grow up with. They didn't have carpets and drapes and swimming pools and recreational facilities, and the social life that goes along with apartment living.

**Smolkin:** We may be on the threshold of a total reversal of  
*continued*



Photos: Bill Simpson Jr.



GOODWIN



EGGERS



SWARTZ

the single-family housing market, in the sense that we will now revert to the low end of the price scale rather than to the high end. We have been riding the wave of the World War II generation, now an affluent generation leaning towards bigger, broader and more expensive houses. We are about to run out of those people, if we haven't already. And now we need to start at the bottom of the line with the new generation, which is affluent only by definition and will be at the lower end of the housing scale.

**Dick Goodwin:** The home is not the crowning achievement of a man's life for this young group. When we were kids the house was the status symbol. Today there are many status symbols that compete with it: education, travel and things of that nature. The point is well taken that this reversal could take place.

**Jim Walter:** Keep in mind that young kids just out of college are all getting paid much more money than any of us got paid. But even if I hire these kids and pay them \$8,000, \$9,000, even as much as \$10,000 a year, they still have to go to an apartment because there is no house that they can afford.

**Manny Shimberg:** One of our big problems is not that today's new consumers can't afford what we are building but that they don't necessarily like what we are building. It's true that for a period of time they will rent, but I think the age-old advantages of home ownership, tax benefits, and status can still be sold to them.

**Teasley:** There might be merit in a program of "build your second home first," which could give a young couple a low-cost home by a lake and an apartment in town. We should find a way to merchandise, as low as we can develop it, a home that could be retained for the future.

**Jerry Nowak:** I have some interesting figures on that subject. U.S. Land is buying and devel-

oping recreation sites an hour's drive from the center of major population areas such as Chicago, San Francisco and Washington, D.C. In Washington they have a development called Lake of the Woods one hour from the White House. This project has 3,800 lots, and 2,600 of them have been sold in the first year of operation.

The original lot price was \$5,500, and the average buyer income is \$9,500.

**Don Tarinelli:** We are now housing the post-war baby crop in our 221d3's—not the low-income groups. They are earning less than the median income, but they are college-educated and in the beginning phases of their career. Their median income is \$7,000. They are paying \$120 for a two-bedroom apartment. They have one or two children. None of us have been able to figure out how we can provide single-family housing for this group because we can't get the cost of the housing down to \$12,000 or \$15,000. We can't produce new, single-family houses at that price, so we have got to work toward new housing techniques.

Despite our attachment to the single-family house, because of zoning restrictions, cost of land and everything else, we are going to have to build greater density, which brings us right back to the townhouse concept. In order to get the idea of home ownership across, we are going to have to use, more and more, condominiums and co-ops.

**Fred Barnett:** I'm not sure that we really need a house today. Market analysis has to be used to determine whether there is a market for houses—rather than trying to sell houses. Does our life still conform to buying a house? It is entirely possible that the crux of the matter is not money, or the price of land, but going up to the lake and having a second vacation house and a boat.

**Jack Bowles:** In our area we find that the single-family mar-

ket is still good and strong, but the major reason for builders moving out of the single-family market is the fact that there is no longer any financing. You can get financing in multifamily, so our builders have moved up to multifamily.

**Shimberg:** We have to give families smaller square footage, and the only way we can do this is to give them a smaller space with the illusion of a bigger space, like a patio home. But one pitfall is thinking that merely increasing density decreases the price of a dwelling unit. In California, where lots of raw acreage is priced at \$35,000 an acre, doubling your density might mean a very drastic reduction in price. If, however, you are in areas like Florida, where the average acre goes for \$3,000 or \$4,000, doubling the density won't necessarily decrease the selling price of a unit. Then, too, you normally find out that increasing density requires amenities that may not have been in the typical single-family house tract, and will, very often on low-price acreage, add to the cost of the dwelling unit what you took away from it by increasing density.

**Meyerhoff:** You have to know your market to know whether or not you absolutely must have, say, a swimming pool. Knowledge of your market keeps down the number of three-bedroom units in an apartment, simply because you can't provide the right environment for children without having the place become a nuisance to the one- and two-person households who normally occupy the place.

**Tomlin:** One of the biggest factors today is mobility, or the desire for mobility.

**Smolkin:** We find that you can't classify apartment and townhouse dwellers in any particular age group or anything else, but you can predict that about 80% of apartments will have three

people or less under the roof. But I think the real threat to single-family housing in this country is for somebody to really develop apartment projects designed and oriented for six- to 12-year-old children.

**Tarinelli:** To determine our housing-type mix, we should talk about age groups, economic changes in the housing market and sociological changes, too. We have great unrest in the central cities, partly because of poor housing conditions. This could easily cause a change in the kind of housing we will produce.

**Bortz:** If we continue to build the same stuff we have been building, I suspect our profits will begin to slip. Someone said it is impossible to get ahead of today's market, that we can't really anticipate 20 or 30 years ahead, but I take exception to that. If you look at the good apartments that were built in the 1920s, you'll find that most are still highly desirable, particularly where the environment of the neighborhoods has held.

I think that these neighborhoods have held together better because they contain a variety of dwelling types (apartments, townhouses and homes) and because they often had convenient commercial facilities and good traffic patterns, and they respected the pedestrians.

We know that people want more service now, yet it's a lot harder to get domestic help. No one wants to spend time cutting the grass or working in the yard instead of playing golf.

**Smolkin:** However, we may be getting into even more and more recreation. The developer of the Woodlake project in California said the key to its success was not so much the facilities, but that he hired, from the municipal recreation department, an organizer, a prime mover of activities. That's part of the total environment.

**Matt Jetton:** There has to be some adjustment between the apartment as we know it today



SHIMBERG



MEHRAN



BOWLES



TOMLIN

and the single-family as we know it today. Indoor-outdoor privacy, so common to new houses, is where apartments have failed. In an apartment you attach yourself only to what is inside the unit, not to what is outside. Once you walk out the door you have lost all your privacy. We are trying to develop apartment privacy outside as well as inside.

**Huie:** On the other hand, I had an apartment project three or four years ago that for a long time just did not do well. One of the reasons, we finally found, was that it might have been a little bit too private for a lot of our young people. They like to get closer together. They like to go through an area where people see them. When they go home they want someplace where they feel they belong. They don't want too much privacy.

The average apartment tenants will forego a lot of physical amenities if you can create an atmosphere where they feel they belong and can meet other people. Single girls rent apartments to meet men, and the same thing applies to the men.

**Smolkin:** Let me rattle off a few design features that are really big now. They may be old-hat in some areas but brand-new in others. First of all, we need a change of levels in apartments, different floor levels, different ceiling heights.

We have to pay extreme attention to texture in wall surfaces. You can't have four blank walls in every room anymore. You need a highly dressed-up effect.

You have to put in fireplaces wherever possible. You need much larger private patios, maybe 20' wide and 25' deep, as standard features.

You need privacy walls for these patios so that they are not just an open thing. Second-level patios that are not merely 6' balconies, but actual structures.

There is the increasing proportion of townhouses within apartment complexes by market demand, not by internal economics. Economically, they are low-profit,

but the market demands them.

As far as a total package of appliances in the kitchen goes, it is very dangerous to leave any item out. If you have to come back later and put any item in, you are in a helluva fix, and the rate of consumer expectation rises all the time. Carpets and drapes are almost standard, of course.

Now, a very important element is parking. Nobody has a good solution to the parking problem except to suggest that you will be in a bad situation if you have less than two spaces per unit.

**Dick O'Neill:** A year or two ago there was a heavy accent on the master-bedroom suite with a fireplace, a TV area, chairs, library, kingsize bed, a great big dresser and even a sunken tub. They still want big bedrooms, but do they want all of that other stuff?

**Smolkin:** I think it depends on the price range. If you get up to about \$200 a month, you'd better put everything in there that the mind of man can conceive of, because about five years from now, it will be inadequate.

**Alan Eggers:** The product manufacturers are closely relating their products to home furnishings. But what are the interests of the 25-year-olds? Are they all mod-conscious? Do they like contemporary or provincial, or do they all want modern furniture? We should try to analyze their tastes in all products; is it contemporary or is it a mixture?

**Smolkin:** Our analysis of 125 cities tells us that the housing boom anticipated is greatly overrated, that we are dealing with an increase of about 25% in five-year segments and not 100% or anything like that; it tells us that there is a mass unserved market in the rental market between \$80 and \$100 a month; it tells us that the mass market for single-family housing is approaching the \$30,000-to-\$35,000 range.

**Bob Ritchey:** Ten years ago we sat around and knocked out a list

of things that influenced people to buy, and they lined up as follows: Financing was the first; location, second; space and livability, third; eye appeal, fourth; maintenance and operation of the house, fifth; and then, finally, down at the bottom, what it is

made out of. We ran the same type of study again just recently, again associated with the NAHB Research Institute, and we found that those influences are exactly the same today as they were ten years ago.

## 2 Changing demand means new approaches to builder management and marketing

*At this moment, the multifamily market may be bigger than the single-family-house market. The equity the builder needs today to provide the amenities that ever-larger apartment developments demand makes it difficult for the entrepreneur to start out from scratch.*

**Smolkin:** In the hundred cities where the NAHB reports local market conditions [the 100 largest housing markets in the U.S.], 50% of the projected housing construction this year will be in multifamily dwellings. Due to the nature of those cities, I would guess that 80% of that 50% would be in non-elevator buildings.

Due to the fact that an apartment is built on the credit of the sponsor, whereas a house is sold on the credit of the buyer, I think we are going to move towards an era of large apartment developers who have strong personal credit, which is a change from being able to get into the housing business with \$5,000 or \$10,000. You can't do that in apartment building.

**Shimberg:** The apartments that I see have more and more amenities like swimming pools, bowling alleys, and what-have-you. The amount of equity required to go into an apartment project that will last over the years is becoming so great that the number of builders with this type of front money is much smaller than the number going into the house-building business.

**Fritsche:** We can't think only of the market today; we should be concerned with the market in the year 2000. That mortgage is not going to be paid off until almost the year 2000 and it prob-

ably will have been refinanced four or five times. What is happening sociologically is an important factor in meeting the needs of the market now and in the next 32 years.

If you do supply the amenities—the swimming pool, racquet clubs, golf courses and so forth—you are talking about going in with very substantial investments, and it is not easy to get into the market.

**Meyerhoff:** If a guy's got three days off, I am not too sure whether he wants to stay around the same place he's been for the other four days. We have an olympic-sized swimming pool in one of our Georgia projects—the same size as others we have built elsewhere—and I'll bet you we have one-fourth the number of people in that swimming pool on the weekend as we have anywhere else. Whether or not you need some of these amenities depends on the geographic area.

**Huie:** In Dallas you have to have a swimming pool if you are going to have an apartment house of any size. Whether people use it or not is another thing, but you have to have it.

**Walter:** Harvey's right. I happen to live in an apartment here in Tampa, and it's got a swimming pool. I've been there about a year

*continued*



and a half, and I've never put my foot in it. Although we have about 100 apartments in the building and you can go there on the hottest day of the year and be lonely by that pool, I agree that you have to have it. If it hadn't had the pool, I probably wouldn't have rented the apartment.

**Swartz:** It appears to me that the apartment business is where the homebuilding business was ten years ago. We are just starting to go through an apartment revolution in which we will see a whole new way of competing. The Woodlake project, for example, is the kind of thing that is going to captivate the apartment renter of tomorrow, and the bigger the projects, the more amenities that can be included in them. I think this is going to take more capital, and it is going to take a lot more specialization on the part of the builder.

**Fritsche:** There are some awfully ugly apartments in America that are 100% rented, and you stand in front of them and you wonder: Why in the world do people live in those ugly things? But, nonetheless, they are just beautifully rented. On the other hand, there are some golf-course apartments and some apartments built around lakes and other features that are esthetically beautiful but stand as monuments to somebody's curiosity. They didn't hit the jackpot.

Now, it is anybody's guess as to how important recreation really is as far as keeping those units rented. I think the Sunday morning brunch out around the pool has become almost an institution in large apartment developments.

A tremendous amount of capital, public relations and so forth is being made out of these little relatively inexpensive features.

**Brosius:** One other ingredient is the ready availability of money for apartment buildings from people who are looking for a depreciation shelter and who are not builders. If they can find some-

body to be the general contractor and build for them, all they need is a good market survey.

**Jetton:** It is very easy to get people to go in on a joint venture after you have built one of these apartments, but it is very difficult to get anybody to go in on a joint venture in subdivisions.

**Goodwin:** I think that it is going to be more and more difficult for builders who are not established in apartments today to move into them. I think the lenders are looking for responsible businessmen to manage this. As you previously mentioned, we are individual builders, and also businessmen, but I think the established builders are going to grow much stronger.

**Fritsche:** When you look at the builder's view of the apartment market, there are several different approaches. There are some very successful builders who have built thousands of apartments and don't own one. They want to get in and get out right away.

There are others who are marginal investors themselves. They retain only 10% of the action, and sell off 90%.

**Bowles:** In the future, do you see any land developer furnishing land already zoned for apartments and the builder just going in and buying land on credit as they buy it for single-family housing?

**Meyerhoff:** Sure. They are doing this in California on a lease basis. I see this happen all the time and I think there is a trend toward it. We have a job now in Baltimore that is on a lease basis. We have an option to buy, however. I think there is obviously a market for this. It takes an awful lot of money to do any kind of residential development today because of the local requirements. Major sources of capital might be attracted to this in an equity position under either a subordinated or non-subordinated lease. They get so much cash flow out of it.

**Hue:** Most of the apartment buildings in Dallas are owner-operated. Some of them have partners in joint-venture deals. The ease of getting into the business depends entirely on how big a builder wants to be. Most of the mortgage companies look at the new owner anytime a building changes hands. They want to know who is going to manage that building.

**Walter:** Being a good builder doesn't necessarily mean that you

are a good apartment manager, but the larger builder with a sophisticated organization has people that can run and manage apartments.

**Bowles:** I certainly don't think that single-family building is dead. There are a lot of people who have moved out of the single-family building area temporarily. But if you take the 6% ceiling off of government-insured loans [*Ceiling was lifted May 7.* Ed] a lot of them will be back.

### 3 Changing demand also calls for fresh new thinking about obsolete land use

*Not only can we not afford to go on using land wastefully, but there is some evidence that younger buyers do not want the responsibility of keeping up oversized lots. P.U.D. legislation is being passed in many states, with a remarkable uniformity in its provisions.*

**Fritsche:** We talk about the high cost of land, but we leave out the one key word, the high cost of developed land.

This goes up faster than the land. The land-development standards we use now in almost every phase of development are at least 200% higher in quality than what we used to have.

**Ritchey:** The total cost of land is a very important part of the package. It has to be developed before it can be used. But the land problem will be solved, and very easily solved, if transportation is solved. There isn't a city in this country, in any metropolitan area, that has adequate rapid-transit systems.

If only one and a half percent of our total land volume is being used in our urban plant, just imagine what could be opened up if we did have rapid-transit systems in this country.

**Fritsche:** One of the devices that we use to promote P.U.D. is open space and it is very easy to do. Picture the average subdivision with streets and take the

area from the front door of one house to the front door of the house across the street—it is usually in the neighborhood of 110'.

You can mow it, you can walk to school on it, and you can drive on part of it, but here is a tremendous luxury that is built in—an open space that is built into our present subdivisions and that is virtually a waste.

**Brosius:** One serious proposal which has been kicked around in my area is an almost confiscatory zoning tax that would tax a very substantial portion of the land value resulting from rezoning. It flows out of the concept of scarcity, which is inherent in all of our zoning legislation. The building industry should attack the whole concept of scarcity as a zoning tool; that is, the concept that the only good zoning is agricultural and anything less than that is bad in relative degrees. In the eyes of many people, it is important to keep a minimum of higher-density-classification zoning on the market. This creates the concept of scarcity and, therefore, high prices, which





WALTER

STANDARD



Bill Smolkin  
SMOLKIN

MEYERHOFF



come back to us in all other kinds of problems.

**Masud Mehran:** How much advanced land planning do we need in order to build America in the next 25 years? How best can we minimize government intervention in planning our land for the next two decades and increase the quality of land planning by private enterprise. I hear from the Mayor of my town, and from the county director of planning, that we should use our imagination.

But how can we when they govern how we cut up our land, the width of the street, the layout of it, which one is going to be the major street, which the collection street, which the minor streets.

Where are we going to be able to use our imagination and initiative when we are told from the beginning what to do. In fact, these rules very much govern the price range that we can build in.

**Goodwin:** There are current answers. I am on the Land Use committee of the NAHB. I watched the planned-unit development studies evolve and it was a very exciting thing to see and be a part of. We introduced a P.U.D. bill last year in the New Jersey legislature and it didn't get anywhere. The land planners laughed at us. They knew we had no chance.

Last year it went in again. We had three bills in the legislature

and, much to everybody's amazement, the bill got passed. The complete planned-unit development act was signed by the Governor last May. Well, I am applying right now for 1600 multifamily units in a township that just adopted this ordinance.

If you would get these P.U.D. bills into your state legislatures that would start it rolling.

There are two ways to do this. One is to use the NAHB Model Enabling Legislation on P.U.D. and the other is a municipal ordinance which many states can take today under their land-use act.

**Mehran:** When we started on our townhouses we had a density of 5.5—that's when we started—now we are approaching a density of 1.5. When the land was \$900 an acre, density was 5.5. Now that it is up to \$8,000, it is back to 1.5, which is going in the wrong direction.

We have P.U.D. in the City of Livermore, but it is not worth the paper it is written on because it is a one-way agreement. I would like to see P.U.D. as a binding contract between the city or the local government, and the developer. The P.U.D. we have is a permit, but anytime that the city wants to change this, it can. And there is always something that the city is going to find that they want to change. The developer doesn't have that opportunity.

**Barnet:** We have slums in Atlanta, and we have suburbs. These dwelling units have to be built to rent for not more than \$80 a month and they are going to be built. They represent a market that is being tapped. We have one young developer in Atlanta who is building three-bedroom condominiums for \$80 a month.

**Tarinelli:** The big conflict is going to be how to get the people out of the center city and housed in the surrounding suburbs. The State of Connecticut has come up with a Community Development Act that grants broad powers on a state and local level.

It sets up a "Housing Site Development Agency" to be created within the city, and the state government will pick up the cost of administering. The agency can buy land, either by condemnation or on the open market, develop buildings, and then resell them to nonprofit organizations. The state picks up three-quarters of the difference in cost between acquisition and sales.

It allows a real estate tax abatement, and the state will pick up three-quarters of that. Teamed up with the federal subsidy in the 221d3's this is a good business. You can really get very close to public housing levels. We are building five- and six-bedroom units under this plan now. Granted, these are only demonstration programs, but next year we are going to build 32 units on a very small piece of land which cost \$100,000.

**Goodwin:** In New Jersey a group of concerned businessmen got together and formed the Camden Housing Improvement program. They started with about \$50,000 and invited the local homebuilders to come in and do feasibility studies on rehabilitation.

Our goal is aimed at 2,000 rehab units a year, eventually phasing into new construction all by local builders with labor from the ghetto.

Here is a market that we ought to exploit. The thing will feed on

itself because once you start getting these people interested in earning a better living, get them off the relief rolls, and get them job-trained, they will go ahead from there.

**Bowles:** The federal government tells us that we need houses for the economically deprived, but the tools they give us don't work. You get a 221d3, and the first thing you have to do is pay the highest prevailing wage. And then they tell you that you can build only 21 units per acre.

Let's correct all the programs that we have now rather than try to put in new programs.

**John Koelermij:** I wonder how many of our Congressmen do understand rent supplements or fully understand the turnkey program in which you can go from a \$19,000 unit cost to \$13,000.

**Walter:** Our company is involved in a 221d3 in Atlanta. We are putting it out for bid. But after putting up \$2.5 million, if everything went exactly according to schedule we would make only \$38,000. And I have probably got \$15,000 of that \$38,000 invested just in people's time and traveling back and forth. All we have to do to make the \$38,000 is put up \$2.5 million of our money, take all of the risk until the building is finished and turn it over to the nonprofit sponsor. If we can get a contractor to build it for what the FHA allows, which we have not been able to do as of this date, that's what we'll make. We bought the land and put up all the construction money. If the bid comes in for less than what they have allowed, FHA automatically cuts back the commitment. I am not going to take on another 221d3 until we see how we come out because there is too much exposure for no profit. I can't even pay the bookkeeping department with that \$38,000.

**Tom Standard:** Jim is looking at this, I am sure, from a civic  
*continued*

## 4 Housing can supply its major market and build low-income housing, too

*Low-income housing is going to be built; the only question is whether homebuilders or general contractors are going to build it. The 221d3 program and the new turnkey projects have shown that homebuilders will rush to take part in any low-income housing program that works.*

**Tarinelli:** We have got to find ways to provide three-bedroom multifamily housing. We have done 221d3's with all four-bedroom units and we are designing one now with five- and six-bed-

room units. But we're running out of land. This means that we have to go to the suburbs now, and it is a battle over land-use policies: city vs. suburb. How do we house city people in suburbs?

Photos: Bill Simpson Jr.



NOWAK



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viewpoint. He is putting the job together for a nonprofit group. But for the contractor that takes this job, FHA has got a 7% profit in it: a cost plus 7% plus 3% general overhead, plus 3%. The contractor is bidding it for a price and he says: "I am not going to make more than 13%." So it is a good job for a builder or contractor.

**Walter:** I think the contractor can make money, but there are very few contractors in the U.S. who would spend the time, trouble and money that we have spent on this one particular project, even for the 13%. I mean, he would have to figure it right down to a gnat's eyebrow.

**Tarinelli:** The 221d3's in city urban-renewal programs have a fantastic future. I have done eight limited-dividend, nonprofit co-ops. We did the first one in Connecticut and the first one in Vermont. Now if the homebuilding industry does not want to pick up this business, that's okay, but this housing is going to get built.

The nonprofit group can be a labor organization, and in New Haven, it is the urban-renewal agency itself. It institutes the nonprofit and becomes the mortgagor and the sponsor. I am going to take on two projects in Bridgeport, and my only investment is going to be my knowledge of the 221d3's. I am going to be the housing consultant to run through the FHA commitment. It takes me about an afternoon to fill out one of these forms, and I will process it through to the commitment for the nonprofit group.

**Walter:** But it is not risk-free because there are 20 ways that you can run over your estimate. You can have a nice little strike to tie you up for two months while the interest on the money ticks right along all the time. The cost plus seven is only cost plus seven, so long as you are under their appraisal. It might turn out to be cost plus one.

**Tarinelli:** That is exactly right, but the difference is this: The general contractor is interested in this kind of a contract, just as much as he is interested in a lump-sum contract, because he runs the same risk of a strike. But here he has cost plus and an upset price, so if he gets this type of a contract, he is certainly happy about it.

**O'Neill:** The aspirations of the lower-income group are for the same kind of housing that we all enjoy. They want appliances, indoor plumbing, electricity, heat, and they want cooling. Now, that costs money and we know it. We have the problem of supplying a \$20,000 unit to a family that can only afford, say, a \$4,000 unit.

**Ritchey:** The mobile home as we know it, with wheels under it, is going to disappear, but out of it may come a unitized type of component. We may come up with a new concept of a manufactured home.

**Nowak:** The mobile-home industry in 1967 will sell about 235,000 units. They are delivering a finished home for as little as \$6 a sq. ft. I don't believe that anybody in the homebuilding industry can even touch this figure. They sell this with as much as a 10% to 25% down payment, financed for seven to ten years, with add-on interest. The loss ratio is extremely small. Sales are predominantly to low-income families. The return on a mobile-home park is a lot better than the return on an apartment project, in the area of 18% to 25% per year on the investment. And, as of now, the finance people aren't asking for a piece of the action. I will admit that the image of a mobile-home park is lousy, but the competent builders in this country can do a great deal to improve that image by building and operating attractive mobile-home parks. I think that the dollar return to each of you will more than stand on its own feet, and at the same time, this industry can provide low-cost housing, which is needed so badly.

**O'Neill:** When you consider the price per month to the people living in the mobile home, you have to add rent for the pad, utilities and the financing charge, and that comes out to a bigger figure.

**Nowak:** It is \$125 a month.

**O'Neill:** And what happens if the guy doesn't pay off his loan? The dealer takes it over or sells it to

the park owner. And after the seven-year period is over, that mobile home may be worth zero to its owner, and he still doesn't own his pad.

**Nowak:** We have often asked how to obsolete houses. This is one way. The man paid for it in ten years, and it has some trade-in value. You can put it on a lot and use it for a summer house.

## 5 Do these changes presage an invasion of the industry by corporate giants?

*The record of the past decade shows an unbroken series of failures by corporations trying to break into the business. But some of the new joint ventures are trying to combine the know-how and aggressiveness of the builder with the financial resources of the corporation.*

**Goodwin:** What is the future of the homebuilding business as we know it today? I think there used to be something like 20 or 30 automobile manufacturers. Now, we are down to just a handful. I would like to make a prediction. By the end of the century, General Motors and General Electric and General somebody else will be in the building business right up to their neck.

**Mehran:** I feel that homebuilding is very unique. Although there will be changes in the structure of the total financing of homebuilding in the future, there will still be the need for a liaison between the homebuyer and the financing group, and that liaison is going to be the small builder.

**Shimberg:** I certainly would agree with Masud that the builder, either small- or medium-sized, is not on his way out. However, it could be that the small- or the medium-sized builder is the answer to the major corporate approach to housing. Maybe the large corporation will be more interested in the development of land.

The missing ingredient in a lot of big corporate thinking is not tying in to a group of local build-

ers because building is a localized situation.

**Walter:** I don't think big industry is ever going to get into the housing business, per se. I know you may have some cases of this, but they will still need a builder.

But I think more and more of the big manufacturing companies are getting into real estate.

The insurance companies want to have a piece of the action, too. But at the same time, they want a hedge. They take the attitude that they are going to put up 95% of the money and take 105% of the profits. It's really tough to argue the point with them.

**Goodwin:** I find that large companies aren't too interested in taking an equity position with builders because they don't like all of that depreciation showing up on their year-end statements and depreciating their stocks.

**Meyerhoff:** I'm not sure that an insurance company is necessarily a responsible partner. I think just the reverse, in fact. In these big companies nobody wants to admit they made a mistake. If they put money into a deal and it turns out sloppy, they will cover it up so far and so deep that nobody



will ever discover what is wrong with it.

I am not sure I bank very much on outside judgment, except from very sophisticated lenders.

**Walter:** Don't worry about the insurance companies having to take depreciation. They have come up with some pretty sophisticated ways to come up with a piece of the action without depreciation. As far as us trying to get the insurance company people to act as our partners, I would go along with Bud's remarks. We all know how long it takes them to approve a loan, but imagine how long it would take them to approve, shall we say, tearing down a building and putting up a housing project.

**Barnet:** It is entirely possible that a different type of big company would come in and take over the building industry.

For example, Sears Roebuck has the facilities for mortgaging and for insurance; they have a building company operating in two or three cities now and they don't have to pay themselves multiple profits. Suppose Sears took an active interest in this and made a package deal with everything in it?

**O'Neill:** It is possible except for a number of things. Sears tried this in the '20s and they got burned badly. And they have been looking at it very closely, through their remodeling activities, for the past two decades. One problem they have is that they are a huge organization, and they have a manager, let's say, in Connecticut, with a guy under him in charge of housing. I can assure you that guy is not paid enough, nor will he ever get enough incentive from Sears, to hustle better than the entrepreneur, to get the job done speedily and get it done well.

**Swartz:** In California I have watched these guys merge right and left during the last two or three years, and most of them were merging because they were going to broke if they didn't get

out in 1966.

I can build 600 to 800 units a year with a small organization. By small I mean with five or six key executives who control everything that we do. In so doing, we can make a very, very good profit percentage. But take an average large corporation. They've got to be confronted with bureaucracy, and I don't care who they are, the bigger you get, the less efficient you get as soon as you move into more levels of management. And the further down from the president you put the control of your money, the less enthusiasm there is for that person to make the very finest dollar decision.

In my opinion the only way there will ever be a General Motors in the housing business will be if that company has a zero profit motive in homebuilding—it will be purely interested in the subsidiary outlets it is going to develop.

There is not that great a profit percentage in housing to allow them to cover their bureaucracy and still make a profit, so they've got to look at how many tires they can still put on the cars that are going to go in the three-car garages, how many washing machines they are going to sell and how many television sets they are going to sell.

That is the only way I can see it becoming feasible for Sears or for any other big company to enter homebuilding directly.

**Fritsche:** One of the large insurance companies about ten or 11 years ago bought 1100 acres in our community and it made headlines coast to coast. An entire article in Reader's Digest told about how this huge organization, starting in Columbus, Ohio, was going to really revolutionize housing in America with their vast resources. Well, the truth is that five years later, just one little old builder in Columbus, namely me, had produced twice the volume this huge insurance company had built.

This stratification of levels of management that Stan Swartz

talks about is so true. They had a senior architect, consulting architect, chief engineer, and all the way down the line to do this work on the 1100 acres.

They managed themselves right into insolvency so that in seven or eight years, they concluded that the profits they had programmed were not evident. The small builders were just running circles around them.

**Goodwin:** Right now, several large corporations have confidential studies underway to see how to get their feet wet in this business. They are going to find out that the best way is not to buy a merger but to go into a joint venture. But eventually they are going to learn this business. Sure, ours is a fragmented industry, and everything you fellows have said is right, but the big boys have their eyes on us.

There is going to be a tremendous demand for housing. They will start going into land with a local builder on a joint-venture basis. Maybe they will go for 100 acres and then five years later acquire 1,000 acres. By that time, they will have an executive in their own organization who has been working with this builder and knows the business.

Eventually, they will drop the builder out of the joint-venture deal. They may take 15 or 20 years to do it but, believe me, they will proceed very cautiously because of the failures in the past.

But I can't believe that they are going to let this plum slip through their fingers when they have the basic ingredients that we little guys don't have.

I predict that by the end of the century, housing is all going to be manufactured off-site. But there's going to be such a tremendous market that the little guy is not going to disappear overnight. But I think there is going to be some very significant changes over the next 32 years.

**Nowak:** Boise Cascade has put together many land-development and building enterprises. This

point was raised: How are you going to manage all of these things? Where are the people that can build a subdivision or operate it and build several hundred houses a year? Boise Cascade has one person that you know, Ray Watt, and they have put no blinkers on Ray, whatsoever. They are offering his management people the kind of entrepreneurial incentive that is necessary to attract and keep and motivate good people.

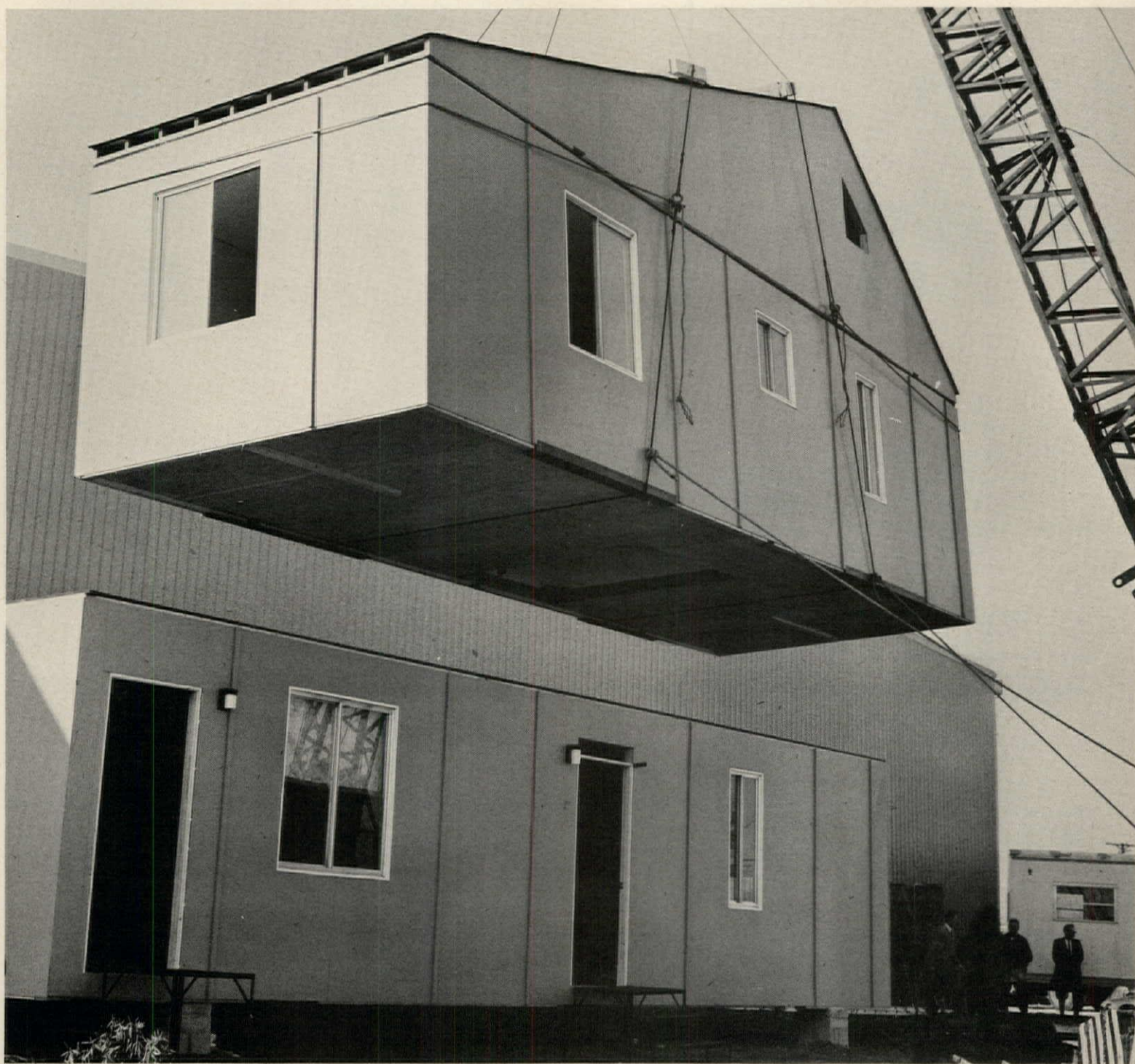
In Los Angeles 1966 was a very difficult year, but I think Boise was very instrumental in helping Ray weather the storm, perhaps weather it much better than had he been in it all by himself. The fact that Boise can absorb some of the financial stresses and strains lets the builder sleep at night because his name is not on the back of several millions of dollars worth of paper. This is worth something to the individual.

Boise has only been in it for three years, and it is going in and moving ahead with housing in four forms. One is land development; one, building such as Ray Watt does; and the other two are prefabricated houses and mobile homes.

We have quite a commitment in the housing industry and we think we have come upon a way to live with it.

**Ritchey:** We said that by the year 1960 50% of the homes produced would come out of a factory, and you know how wrong we were. These same words were uttered in a different fashion in the 1920's by Sears Roebuck.

So I guess it is something like the seven-year locust that is coming around every 25 years. You have got to remember that the prefabricated-home manufacturers today, and I can't see a great deal of difference in the foreseeable future, only deliver from 15% to 35% of what the consumer buys, anyhow. I don't think there is anybody big enough, be it U.S. Steel, Boise Cascade, or Union Carbide, to do that, and stay solvent and sane at the same time.



**STACKUP HOUSE** means fewer jobs and drastic reallocation of building-trades manpower from job site to factory. This one is by Modular Facilities.

## How will industrialized building like this

Trade unions have consistently fought industrialized building—prefabrication, pre-finishing, on-site mechanization and the like—for fear that it is eating away at their jobs. And their fears are well-founded, judging from an exhaustive report issued by the Building and Construction Trades Dept. of AFL-CIO.

But the report—"The State of the Art of Prefabrication in the Construction Industry"—also points out that for some trades the negative effects of industrialization will

be more than offset by a general increase in building.

Source of the report: Battelle Memorial Institute, which spent 11 months gathering and interpreting the findings.

Purpose of the report: to show the department's 18 trade-union affiliates exactly what changes are likely to be forced on them by industrialized methods, materials, and design.

What the report actually means depends on who's interpreting it. Press reactions



## affect these jobs in the next ten years?

have ranged from this headline in a home-builders' newsletter: "Battelle Study Sees No Revolutionary Prefab Advances"; to this one in an engineering magazine: "Greater Use of Prefabs Predicted."

Trade-union reactions have varied, too. President Thomas Murphy of the Bricklayers, Masons & Plasterers International Union says the study isn't complete enough. His reason: "It examines many of the myths about 'industrialized' building without recognizing them as myths. And it only

indirectly takes note of the terribly high price that our economy and society will have to pay to make 'industrialization' succeed."

No such reservations were voiced by the Trades Department. Its official magazine, *Construction Craftsman*, editorialized that the report is filled with good news: "The fears of some that everything was going to be built in factories and shipped in boxes to the job site have been laid to rest. Building tradesmen of the future are going to

need more knowledge and skills than the men practicing the trades today, and the industry is going to require more building tradesmen than there are today. . . . While there may be a gradual phase-out of some skills, this will be more than offset by a growing emphasis on others."

Battelle's projections of who'll be working and who won't are based on its estimates of how fast industrialization will advance. In homebuilding it sees evolution rather than revolution for prefabrication in

*continued*

**Scorecard: How industrial methods may affect seven trades**

	Effect on Manpower				Effect on Skills			
	Total Items	+	-	Net Effect	Total Items	+	-	Net Effect
Bricklayers	25	0	25	-25	0	0	0	0
Carpenters and joiners	30	15	15	0	7	4	4	0
Electrical workers	12	5	7	-2	1	1	0	+1
Laborers	12	3	11	-8	0	0	0	0
Painters, decorators, and paperhangers	31	2	37	-35	0	0	0	0
Plasterers and cement masons	31	10	21	-11	1	1	0	+1
Roofers	5	1	4	-3	2	3	0	+3

**Carpenters: Some prefabbing promises increases in manpower**

Type of Industrialization	Increase or Decrease in Manpower	Type of Industrialization	Increase or Decrease in Manpower
Improved durability of products	-1	Prefabricated gables	-1
Interior subsystems*	+1	Curtain wall design	+1
Mobile homes*†	-1	Metal partitions	+1
Sectional homes*†	-1	Metal stud partitions	+1
Home manufacturers*†	-1	Prefinished panels	+1
Component manufacturers*†	-1	Metal door frames and window frames	+1
Precast concrete components	+1	Anodized-aluminum door and window frames	+1
"Tilt-up" construction	+1	Prehung doors†	-1
Slipforming	-1	Prefabricated cabinets†	-1
Concrete forms (easy removal)	-1	Prefabricated trusses†	-1
Luminous panels	-1	Laminated beams†	+1
Predecorated drywall	+1	Precut lumber†	-1
Drywall heating panels	+1	Foamed-in-place insulation**	+1
Plastic siding	+1	Adhesives*	-1
Prefinished metal siding	+1		
Prefabricated walls	-1		

\* Additional effect: +1 increase in required skills

\*\* Additional effect: +2 increase in skills

• Additional effect: -1 decrease in skills

† Additional effect: Job location shifts from site to factory

**Bricklayers: Precasting and prefinishing eliminate jobs**

Type of Industrialization	Increase or Decrease in Manpower
Larger components	-1
Durability of paints	-1
Unit prefabrication—banks, schoolrooms, etc.	-1
Unitized bathrooms†	-1
Mobile homes†	-1
Sectional homes	-1
Home manufacturers	-1
Precast concrete components	-1
"Tilt-up" construction	-1
Slipforming	-1
Exposed aggregate panels	-1
Sandblasting for aesthetics	-1
Concrete forms (texture)	-1
Brick panel machines†	-1
SCR masonry process	-1
Glass wall panels	-1
Brick panels†	-1
Metal siding	-1
Prefinished metal siding	-1
Prefinished wood siding	-1
Curtain wall design	-1
Plastic overlay on hardboard	-1
Molded plastic tubs with wall enclosures	-1
Molded plastic shower stalls	-1
Adhesives	-1

† Additional effect: Job location shifts from site to factory

**Roofers: Preshingling shifts work from job site to plant**

Type of Industrialization	Increase or Decrease in Manpower
Unit prefabrication—banks, schoolrooms, etc.†	-1
Improved durability of products	-1
Mobile homes†	-1
Sectional homes†	-1
Preshingled roof sections†	-1
Durability of roofing materials	-1
Foamed-in-place insulation**	+1
Adhesives*	-1

† Additional effect: Job location shifts from site to factory

\* Additional effect: +1 increase in required skills

\*\* Additional effect: +2 increase in skills

the next decade. Sample: The factory-produced portion of today's prefabbed home accounts for only 25% to 30% of total house cost, and by 1967 it might reach 45%.

The report finds prefabrication firmly entrenched, however. It says that almost all new housing includes some prefab components and that available technology is at least ten years ahead of the industry.

Why won't prefabrication cause a revolution? Because, says Battelle, its cost reductions haven't lived up to expectations and because it is resisted by two powerful

deterrents: 1) tradition and 2) the existing structure of the building industry. For example, since architectural fees are geared to construction costs, it is "virtually impossible to optimize a design."

Battelle researchers uncovered 249 items that will have an impact on tradesmen. But the list is not limited to industrialized technology. It includes general economic factors, government-subsidized programs and new products and materials not related to prefabrication.

Result: Battelle's scorecards may show a trade seriously threatened by several

types of industrialization (*scorecard excerpts, above*) but at the same time enjoying other favorable construction trends that will offset the bad news.

For example, plumbers (*not included above*) stand to gain nothing from prefabrication. Prefab plumbing assemblies, prepackaged boilers, plastic pipe, quick-lock pipe joints, unitized bathrooms and the like will reduce the need for plumbing manpower and force plumbers to adapt their skills to factory assembly lines. But at the same time plumbers will get more work from 1) more bathrooms per house, 2) bet-

### Electricians: Some prewired parts demand extra manpower

Type of Industrialization	Increase or Decrease in Manpower
Interior subsystems*†	
Unit prefabrication—banks, schoolrooms, etc.†	-1
Improved durability of products	-1
Unitized bathrooms†	+1
Unitized kitchens†	
Mobile homes†	-1
Sectional homes†	
Prepackaged boilers†	-1
Prepackaged water chillers†	-1
Prepackaged air handling units†	-1
Prewired controls	-1
Luminous panels	+1
Drywall heating panels	+1
Multi-functional ceilings	+1
Electric filaments in wall fabric	+1

\* Additional effect: +1 increase in required skills  
 † Additional effect: Job location shifts from site to factory

### Painters: Prefinished components mean a job-poor future

Type of Industrialization	Increase or Decrease in Manpower	Type of Industrialization	Increase or Decrease in Manpower
Durability of coatings	-2	Partitions (metal)	-1
Durability of paints	-2	Prefinished panels	-2
Building systems	+1	Preprinted panels	-1
Interior subsystems	-1	Plastic rain-carrying systems	-1
Unit prefabrication—banks, etc.	-1	Prefinished ceiling components	-2
Unitized bathrooms†	-1	Maintenance-free surfaces	-3
Mobile homes	-1	Plastic overlay on hardboard	-1
Sectional homes†	-1	Coil coating	-2
Luminous panels	-1	"No-air" painting	-1
Acoustical plaster	-1	Plastic-coated metal door and window frames	-1
Predecorated drywall	-1	Prefinished wood windows	-1
Glass wall panels	+1	Anodized-aluminum door and window frames	-1
Plastic panels	-1	Prefinished doors	-1
Plastic siding	-1	Prefabricated cabinets	-1
Prefinished metal siding	-2	Prepainted homes†	
Prefinished wood siding	-1		
Preprimed wood siding	-1		

† Additional effect: Job location shifts from site to factory

### Laborers: Cranes erase some jobs, precasting adds others

Type of Industrialization	Increase or Decrease in Manpower
Improved durability of products	-1
Building systems	+1
Unit prefabrication—banks, schoolrooms, etc.	-1
Mobile homes	-1
Precast-concrete components	+1
Slipforming	+1
Pumped concrete	-1
Concrete forms (easy removal)	-1
Conveyor systems	-2
Cranes	-2
Gun-in-place plaster	-1
Pumped plaster	-1

### Plasterers/cement masons: Precast concrete offers some hope

Type of Industrialization	Increase or Decrease in Manpower	Type of Industrialization	Increase or Decrease in Manpower
Building systems	+1	Luminous panels	-1
Interior subsystems	-1	Gun-in-place plaster	-1
Unit prefabrication—banks, schoolrooms, etc.	-1	Acoustical plaster	+1
Unitized bathrooms	-1	Predecorated drywall	-1
Mobile homes	-1	Drywall heating panels	-1
Sectional homes	-1	Sandwich panels	-1
Precast-concrete homes	+1	Glass wall panels	-1
Precast-concrete components†	+1	Plastic panels	-1
"Tilt-up" construction	+1	Curtain-wall design	-1
"Lift-slab" construction	+1	Prefinished panels	-1
Exposed aggregate panels	+1	Preprinted panels	-1
Foamed concrete*		Multi-functional ceilings	-1
Sandblasting concrete for aesthetics	+1	Suspended metal ceilings	-1
Mechanical trowels	-1	Maintenance-free surfaces	-1
Concrete forms (texture)	+1	Plastic overlay on hardboard panels	-1
Concrete forms (easy removal)	-1	Paper-coated polystyrene foam lath	+1

† Additional effect: Job location shifts from site to factory

\* Additional effect: +1 increase in required skills

ter-equipped kitchens and laundries, 3) increasing maintenance and repair work in existing homes and 4) large rehabilitation programs for low-income housing.

So despite prefab threats, the Battelle report makes a bright prediction for plumbers: "Opportunities for growth are good, the demand for skills will increase." Its prediction for electrical workers is similar: Despite manpower reductions caused by prewiring and prepackaging, other trends—like air conditioning, electric heat and better-equipped indoor and outdoor lighting systems—will cause an overall increase

in the electricians' volume of work.

But for other trades the effects of industrialized housing will not be offset by beneficial market trends. Painters and paper hangers will be hardest hit. Says Battelle: "Future opportunities for this trade are sparse." Some of the reasons are 1) plastic-coated paneling, 2) prepapered wallboard, 3) plastic-clad window frames, 4) vinyl wall coverings and 5) new application methods like no-air painting and radiation curing. Since 60% to 70% of painters' work is in maintenance and repair, the growing emphasis on maintenance-free sur-

faces is bound to shrink jobs severely.

Another hard-hit trade is bricklaying. Says Battelle: "Markets for brick have declined rapidly because of new and low-cost veneering products, new installation techniques and a trend toward large factory-assembled units. The remaining portion of the brick market is oriented more toward appearance and tradition than toward cost."

Other homebuilding trades—with the exception of plasterers—are sized up as flexible enough to adjust their skills and reallocate manpower in ways that will accommodate industrialized technology.

*When tenants fear intruders—and many of them do . . .*

## Tight security

**rents apartments faster and keeps them rented longer**

So say apartment owners and builders interviewed last month by HOUSE & HOME. And the strongest opinions are voiced by men whose projects are in or close to the cores of big cities.

"The first question many prospective tenants ask is about our security arrangements," says Frederick Rose, vice president of New York City's Rose Assoc. "Tenants are sophisticated on this subject, and we make a point of telling them about our trained security personnel and our new electronic security equipment."

In the heart of the cities—and, increasingly, in other areas, too—apartment owners must consider two basic security problems: how to identify and control everyone who enters their projects and how to protect each apartment from intruders.

Solving the problems costs money that usually can't be offset by charging higher rents, says Rose. But he adds, "By talking security to potential renters, you can fill your buildings faster. And if your security is effective, you will cut down on tenant turnover. So your original investment in security measures will probably turn out to be a bargain."

### **These projects show how careful land planning improves apartment security**

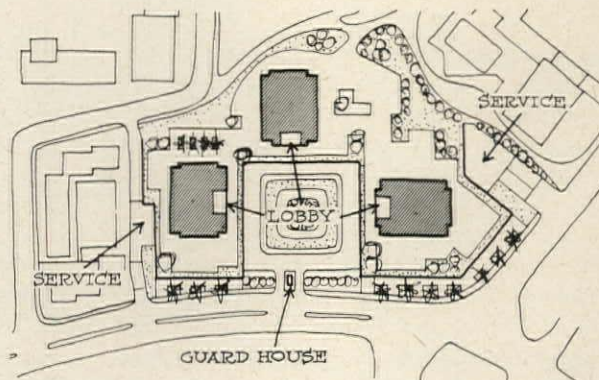
Even the placement of buildings on a site can make security easier—or harder—to maintain.

The 990-unit Boston high-rise project at right has but one automobile entrance. Coming and going, all cars pass a guard-house which is manned 24 hours a day and also has a view of the pedestrian entrance. In addition, each of four apartment towers has its own lobby attendant as a second check

that visitors go where they say they are going.

The 80-unit garden apartment on Long Island (*far right*) has no guards, but it is fenced on three sides and has a single cul-de-sac road. All traffic must return the way it comes in. In addition, parking lots and other common areas are visible to anyone looking out of apartment windows.

Architect for both projects: Paul & Jarmul.





## You can DESIGN your apartments for security

Builders and owners are putting security high on their lists of design requirements. New York City architect Samuel Paul, whose firm of Paul & Jarmul has designed over 50,000 multifamily units, says:

"Security is being stressed more and more in the priorities that owners are giving us for our design programs."

Paul cites one of his current designs—a block-square, 324-unit project in Massachusetts. His first scheme was for several towers of different heights, but the owner vetoed this in favor of one building with a single main entrance and a single service entrance.

"This was a severe limitation on design," says Paul, "but it does permit better control and surveillance of who comes and goes in the building."

Builders and architects agree that security starts with the drawing board. They pay particular attention to these planning and design elements:

**Siting of buildings.** The fewer approaches into the project, the better; and public areas should be exposed to the view of as many apartments as possible (*case studies, below*).

**Entrances.** Minimize the number, and, where possible, have the main entrance command a view of the service entrance.

**Lobbies.** An inner and outer vestibule, with a keyed door between them, is the best arrangement. Large glass areas will make the lobby visible to passersby and

guards. Hidden alcoves, dead corners and dim lighting are undesirable.

**Interior hallways.** Straight runs, without jogs, are best, and lighting should eliminate dark corners or shadows. Choice of floor covering poses a question that only the apartment owner can answer: What will his tenants prefer—quiet halls or the ability to hear approaching footsteps?

**Balconies.** Continuous balconies serving more than one apartment are losing favor because they make it easy for intruders to go from one apartment to another. And on top floors, soffits are being extended to the outer edge of the balcony to prevent entry over the parapet from the roof.

**Laundry rooms.** The newest idea is to build windows into laundries so that passing corridor traffic can see into them. Dead or hidden corners are bad, and toilet facilities should be key-locked.

New York City's Rose Assoc. puts small laundry rooms on every floor rather than a single large facility in the basement. Reason: Women feel safer on their own floors. Bonus: Income from washers and dryers goes up as much as 30% because of greater accessibility and convenience.

**Elevators.** Many apartment owners program their elevators to stop at the first floor going up or down. That way, nobody can get on or off in the basement to avoid being seen by the lobby attendant.

**Public areas.** Grounds, walks, playgrounds and secondary entrances should all be well lighted, as criminals avoid areas where they are clearly visible.

## You can EQUIP your apartments for security

Even the manufacturers of security equipment concede that a skillful, determined thief can't be kept out. But, they note, there are plenty of devices to delay him, discourage him or scare him off (*see p. 97*).

"If it takes a burglar 10 to 20 minutes to get past your locks—or if he thinks he'll be seen going in or coming out—he won't run the risk," says Leon Kotch, security expert for Eaton, Yale & Towne.

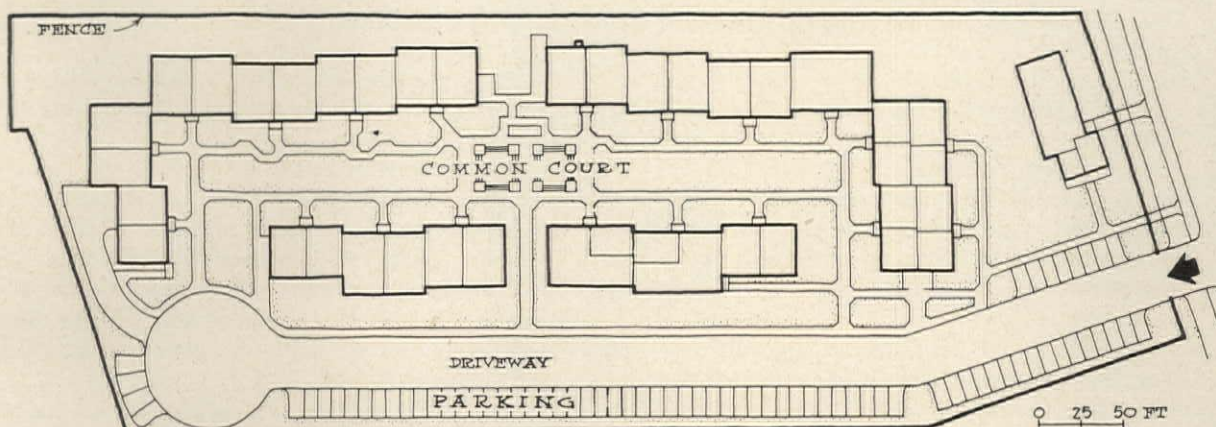
*Asked what it takes to make an apartment reasonably secure, Kotch and other security specialists offer*

*this advice to apartment builders and owners:*

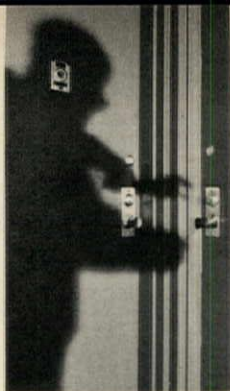
**On front doors.** A door lock with only a spring latch is like no lock at all. Says Dallas Smith of Schlage Lock Co.: "Spring latches can be slipped in seconds with a plastic strip (like a credit card), even by amateurs."

Instead, the lock should have a deadbolt projecting at least  $\frac{3}{4}$ " into the door jamb. Such a lock costs less than \$5 extra per door; and for another \$1 to \$2, the bolt can be made of case-hardened steel.

Viewing peepholes should have a wide-angle lens that makes anyone standing outside the door clearly visible to the tenant inside. Cost: \$5 to \$10.



continued



And the doors must fit tightly into their jambs and should have no glass lights or thin wood panels.

*On rear doors.* Such doors usually have glass lights, which a burglar can break to reach inside and turn the bolt open. Solution: double-keyed locks without a thumb knob. Cost: \$2.50 to \$5 extra.

*On sliding glass doors.* Most glass sliders have simple hook locks that are easy to force. But a "Charlie bar" mounted on the jamb drops down as a barrier that makes the door impossible to open. Obviously, if the glass is broken, the bar can be removed, but most intruders try to avoid the noise of breaking glass. Cost: less than \$10.

*On windows.* Double-hung, sliding or casement windows are not difficult to jimmy open. But there are key-operated window locks that throw a bolt into the window frame so that an intruder can only get in by breaking the sash or frame. Cost: \$2 to \$3 per window.

*On announcing systems.* The conventional speaking-tube/door-latch buzzer is not very effective because tenants tend to open the door without identifying the caller. Now, closed-circuit television cameras in the outer vestibule can throw a visitor's picture on a viewing screen in the apartment called (and no other). If the visitor is unwelcome, the tenant need not answer; if the tenant is doubtful about the visitor's identity, he need not open the door.

In a typical 100-unit building, a TV announcing system costs \$150 to \$200 per apartment, including a year's service. For 10% more, a second camera can be mounted at a second entrance, permitting tenants to see and hear calls from either location by merely pressing a button.

*On surveillance systems.* It may be uneconomical to station a guard in areas that need watching—laundry rooms, for example. Here again, an answer is closed-circuit TV. Cameras mounted in critical areas give continuous pictures of each area to a doorman, guard or super at his regular post. Each camera and monitor set should cost from \$1,200 to \$1,500. Supplemented by intercoms, TV surveillance is even more effective because guards can communicate with threatened areas.

*On alarm systems.* In attended buildings, apartments can be electronically guarded when tenants are out. If an apartment door is opened while it is "on security," a buzzer sounds and a light flashes on a control console in the lobby. Cost in a typical high-rise building: \$50 per apartment. For about the same price, a similar system can be installed in garden apartments. The tenant turns on the system before leaving his apartment; then if front, rear or master-bedroom doors are opened, an alarm sounds at a central location such as a super's office or gatehouse. Upon his return, the tenant switches it off.

## You can **MANAGE** your apartments for security

Management boils down to a basic question: How much manpower can the apartment owner afford—and how should he deploy it?

Luxury apartments with single entrances have always had doormen, but many apartment owners now add a second man in the inner lobby. Called a concierge, he acts as a second check on visitors, announces their arrival to tenants (everyone must be announced), takes over the door when the doorman is away from his post and performs small services in addition to his security duties.

On the other hand, Jerome Rappaport, owner of Boston's Charles River Park, has moved doormen away from fixed stations in the lobbies of his four high-rise buildings to a pair of central guardhouses. From these posts, the men not only scan the four lobbies on TV cameras and operate remotely controlled door locks but also watch the grounds and roadways.

Rappaport's method has been supplemented by a \$10,000 radio system that lets a centrally located guard instantly report emergencies to roving guards equipped with receivers.

Still another idea comes from New York's Fred Rose: He suggests using trained dogs in suburban projects where, he notes, the problem is not so much burglary as vandalism stemming from youthful boisterousness.

"Youths are not intimidated by a guard," says Rose, "because they know he won't shoot or club them. But they fear and respect a dog."

A dog sees and senses what a guard might miss, Rose adds. And a team of one dog and one guard can

often be as effective as a two- or three-man team.

*No matter how an apartment owner uses his security personnel, only trusted employees should have access to master keys.*

In multi-building projects, experts recommend a master key for each building. This means more keys, but it keeps the loss of one key from compromising the entire project. And if a project is large enough—upwards of 1,000 units, the owner can buy a special series of locks, keyed for him alone, at no extra cost.

Every time an apartment is vacated, its lock should be changed. To simplify changes, install locks with interchangeable cylinder cores—the old core is removed with a twist of the master key, and a new one is inserted.

"Do this immediately after the new tenant moves in," advises Dallas Smith of Schlage Lock. "Do it while he watches so he knows that the previous tenant has no keys to the new lock. It only takes a few extra cylinders per building to permit this switching, and they only cost a few dollars each."

*The biggest single security loophole in most projects is caused by commercial deliveries to individual apartments.*

At 1,500-unit Charles River Park, for instance, hundreds of delivery people were tying up service and passenger elevators. Owner Rappaport solved the problem by giving one merchant—a laundry and dry-cleaning service—a rent-free basement location. In exchange, the merchant picks up and delivers for all services and stores used by the tenants except an on-site supermarket.

Any objections by tenants and merchants? Yes—but Rappaport decided his tenants' security outweighed the merchants' privileges.

**From electronics to hardware—a roundup of SECURITY EQUIPMENT**



**TV surveillance system**—a camera mounted in a fixed position transmits via coaxial cable to a monitoring set—needs a guard or doorman to watch the screen (or screens). Suggested for hard-to-watch loca-

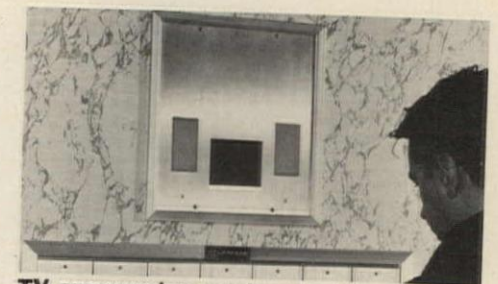
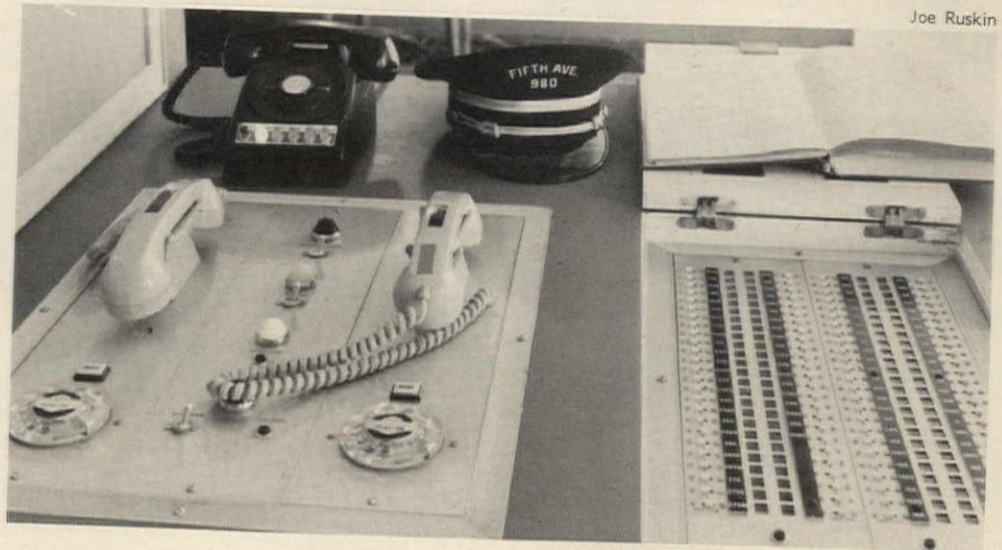
tions such as laundry rooms, rear entrances and elevators. Alarm sounds if camera is tampered with in any way. TPT Communications, Long Island City, N.Y. Circle 260 on Reader Service card



Joe Ruskin



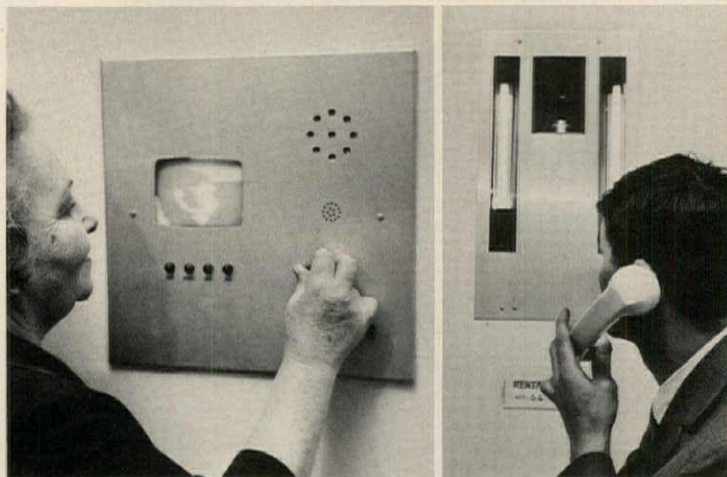
**On-guard system** is controlled by the doorman, who activates a door switch in the apartment door when the occupants go out. As long as the apartment remains on the system, anyone entering or leaving—by key or otherwise—will sound a constant alarm at the control panel (closeup, right). A red light identifies the apartment entered. Auth, Long Island City, N.Y. Circle 261 on Reader Service card



**TV announcing system** enables tenants to see, as well as talk to, persons at the front and/or rear entrances. When buzzed, tenant lifts the handset on his apartment receiver and can immediately see visitor's image on his screen. No warmup time is required for transmission. Optional feature: Receivers may be wired to come on automatically when apartment is buzzed. Loeffler, New York City. Circle 262 on Reader Service card



## Six announcing systems



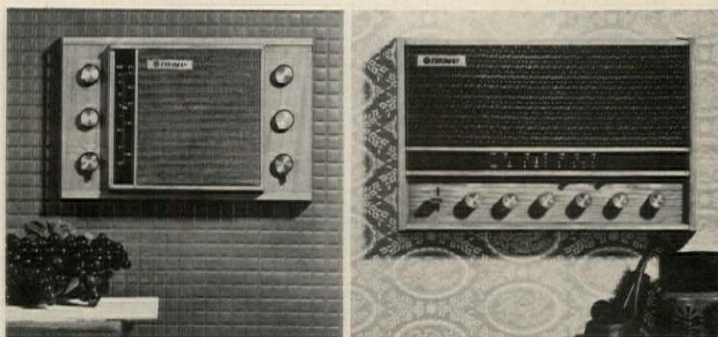
**TV announcing system** uses a hidden camera to pick up visitors approaching the apartment directory. When they signal, their image appears on apartment monitor. New systems have telephone handsets. TPT, Long Island City, N.Y. *Circle 263 on Reader Service card*



**Lobby-to-apartment telephone** permits a tenant to use his regular telephone to talk with visitors in the lobby. It signals visitor's calls even when phone is in use, lets tenant hold outside call to unlock door. New York Telephone. *Circle 264 on Reader Service card*



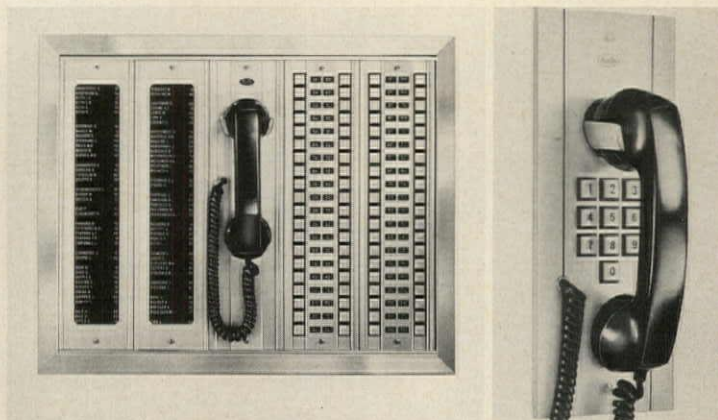
**TV system**—a closed-circuit TV camera and a 9" TV receiver with intercom and telephone-type receiver—was introduced in Japan this spring. When visitor pushes intercom buzzer, image appears on TV screen. Matsushita, Kadoma, Osaka, Japan. *Circle 265 on Reader Service card*



**Surface-mounted radio-intercom** available in two models incorporates a burglar- and fire-alarm accessory whose alarm signals come right through the intercom speakers. Thomas, Louisville. *Circle 266 on Reader Service card*



**Entry system** for buildings with no doorman incorporates a foyer directory with intercom speaker (*above*) and an apartment station (*not shown*) with button to unlock foyer door. Apartment station plugs in. Emerson, St. Louis. *Circle 267 on Reader Service card*



**Handset-type entry phones** link each apartment with the lobby. They come in sizes for as few as 21 apartments (*above, left*), go right on up to the touch-dialing phone shown at right for more than 1,000. Auth, Long Island City, N.Y. *Circle 268 on Reader Service card*

*continued on p. 100*



## Can faucets turn people on?

This one does. It's a Moen. It's single-handled.

It also works more smoothly, more quietly than any single-handle faucet we've ever tested. People react to that kind of quality.

They recognize the Moen name, too. Moen ads are being seen in four leading kitchen and building idea magazines.

We don't claim Moen faucets will sell your houses. Let's just say: when a woman sees a Moen, she wants to get her hand on one.

**Moenique™ (right) is Moen's unique new way to put everything around the tub in one convenient place. Ask your plumbing contractor about the Moen and Chateau lines of kitchen/lavatory faucets, shower valves and Moenique. Or write us for information.**



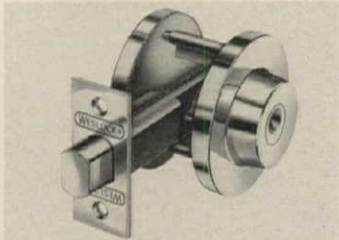
B-689



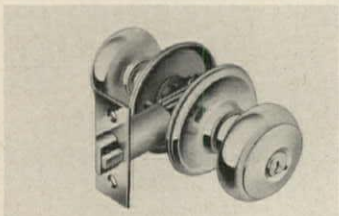
the faucet that  
turns people on.



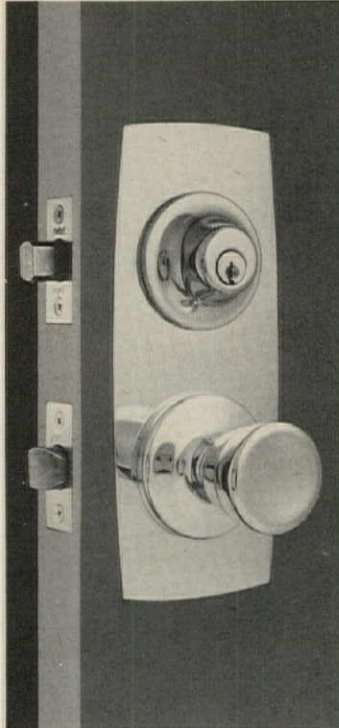
## Eight locking devices



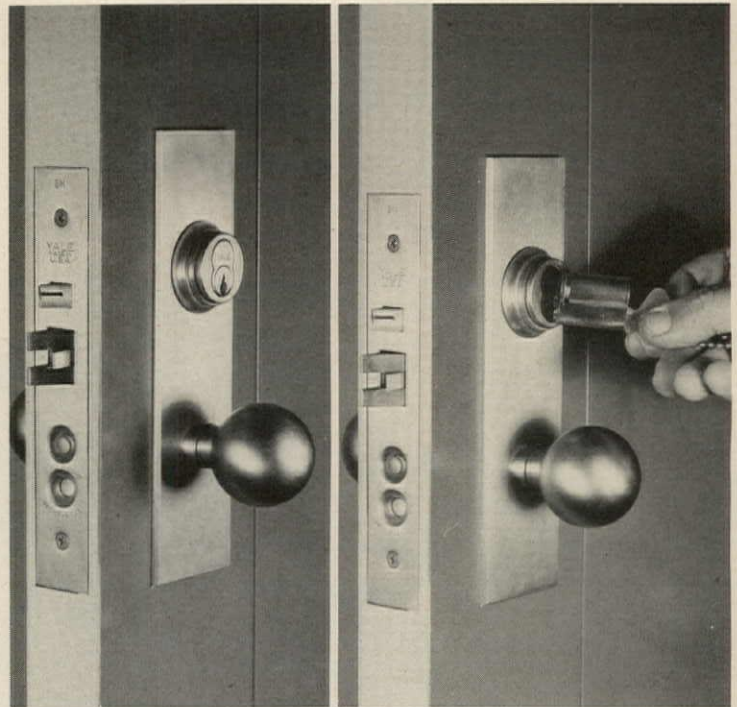
**Auxiliary deadbolt** is designed to harmonize with any style of door hardware, and any finish offered on the manufacturer's other locksets can be duplicated. Bolt extends  $\frac{5}{8}$ " into door jamb. Keying on one or two sides is available. Weslock, Los Angeles. *Circle 269 on Reader Service card*



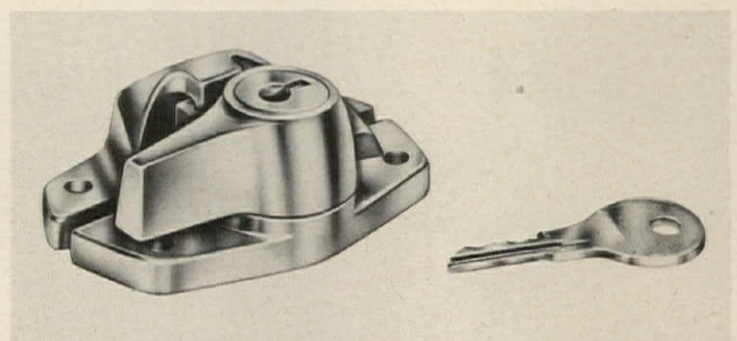
**Deadlocking latch** has a small bar alongside the latch bolt that pushes into the lock mechanism when door is closed, prevents the latch bolt from being forced back. An inexpensive improvement on the common spring latch. Weiser, South Gate, Calif. *Circle 270 on Reader Service card*



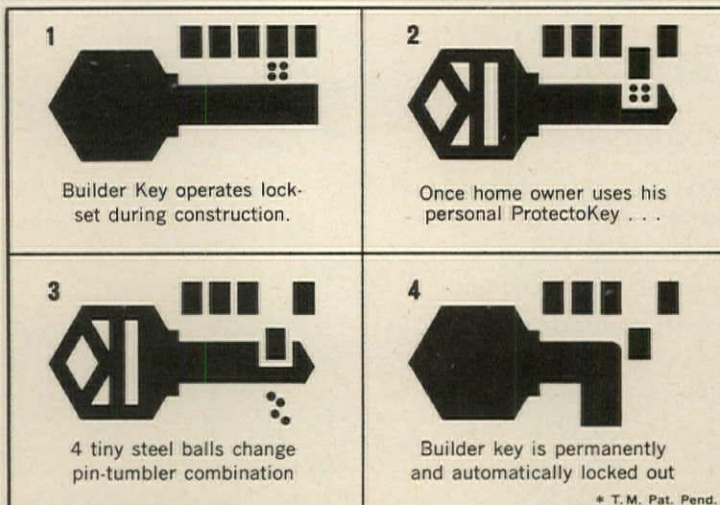
**Deadlock adapter plate** is designed to position both the cylinder deadbolt and any model of the manufacturer's locksets, and to act as a decorative frame. Deadlock is keyed on outside, has a thumbpiece on the inside. Kwikset, Anaheim, Calif. *Circle 271 on Reader Service card*



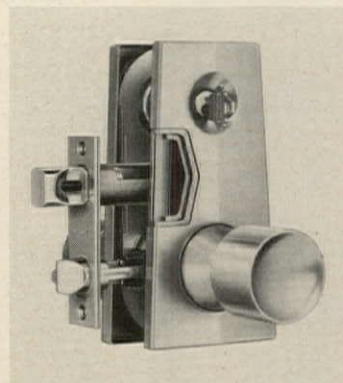
**Removable-core cylinder** permits instant changing of any lock. A simple twist of a master key removes the core without interfering with the locking mechanism. Extra cores allow shifting of locks when tenants move out. Yale & Towne, Rye, N.Y. *Circle 272 on Reader Service card*



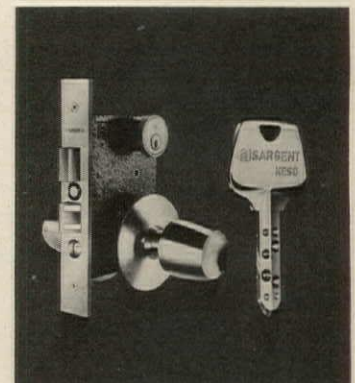
**Window-sash lock** will not operate unless key is in lock. Removing key locks the window, which cannot be opened even if an intruder breaks the glass. Unit has chrome finish and a contemporary design. Loxem, Midland Park, N.J. *Circle 273 on Reader Service card*



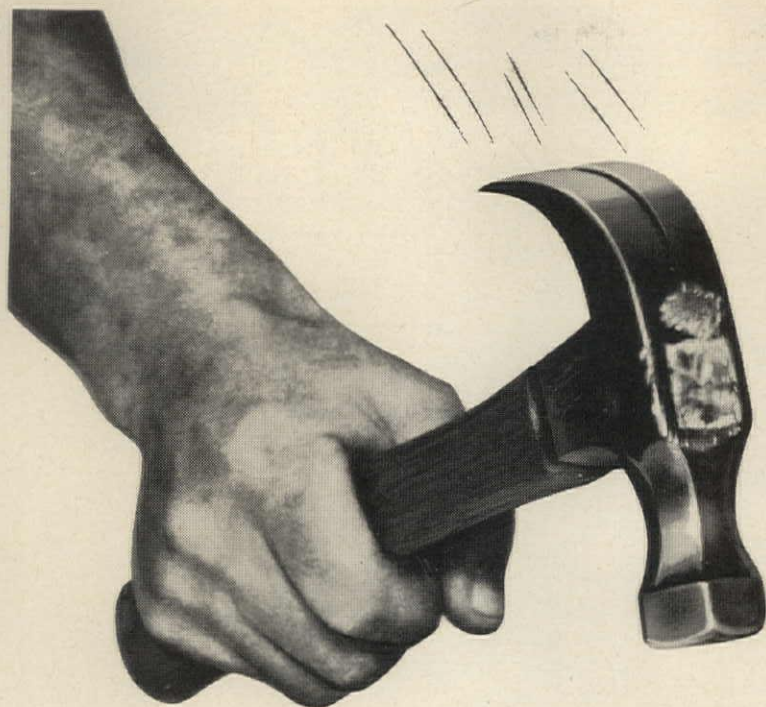
**Master keying system** allows subcontractors access during construction, but after homeowner or tenant uses his key, all former keys are useless. Customer's keys are delivered in a sealed envelope when he moves in. Kwikset, Anaheim, Calif. *Circle 274 on Reader Service card*



**Double-security lock** combines a 1" deadbolt with a  $\frac{1}{2}$ " deadlatch, both released instantly from inside by turning either thumb turn or door knob. Deadbolt has case-hardened steel insert that resists hacksawing. Schlage, San Francisco. *Circle 275 on Reader Service card*



**New-principle key** cannot be duplicated on ordinary keycutting machines, but must be ordered directly from manufacturer by authorized personnel. Highly pick-resistant. Available on all locksets and exit devices. Sargent, New Haven, Conn. *Circle 276 on Reader Service card*



## You can't afford it!

■ You can't afford it if you do a lot of nailing. If increasing labor costs are cutting your profit margin.

Paslode puts profit back into your nailing operation with two fine pneumatic nailing tools—the Gun-Nailer® and the new Stallion. Both are lightweight, easy to load and operate, and eliminate nail waste. And both reduce labor costs considerably.

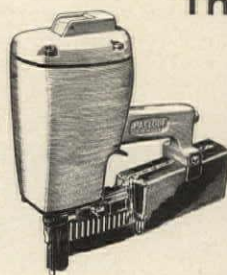
For example, if your total labor cost is \$5.50 an hour, you can save up to \$57.27 in labor per hundred pounds of 16d nails using the Paslode Stallion.

**FREE COST CALCULATOR!** Shows your nailing costs and potential savings. Write for your free Calculator. We'll include details on the Stallion and Gun-Nailer.

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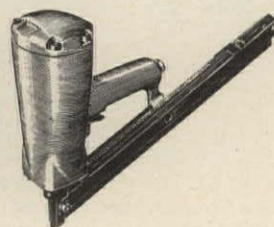
### The STALLION



Drives 16d nails with one blow. Powerful, fast nailing of box, sinker, common and screw-type nails—4,000-5,000 an hour, including reloading time. Cartridge loading. Tool weighs only 11 pounds. *Nails conform to Federal Specification FF-N-105a, Interim Amendment-2, April 7, 1964.*

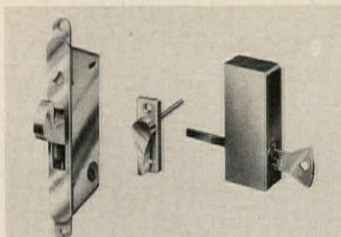
### The GUN-NAILER®

Drives all types of 6d and 8d nails. Up to 7,000 an hour, including reloading time. Sturdy strip loading. Weighs under 8 pounds. Proved dependable. It's been the leading power nailer for over five years.



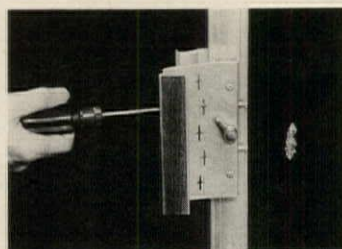


## More security equipment



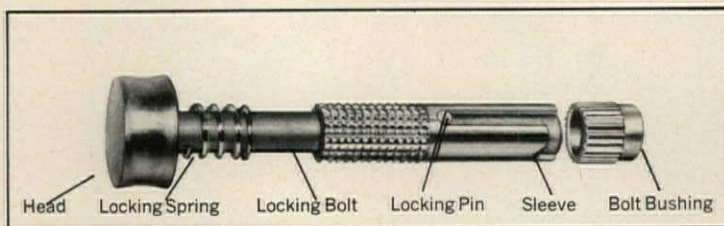
**Sliding-door deadlock** (left) fits within narrow stiles of metal or wood sliders, is used with any type surface pulls. Accessory cylinder pull (right) accepts the same key as other doors in the apartment. Adams Rite, Glendale, Calif.

Circle 230 on Reader Service card



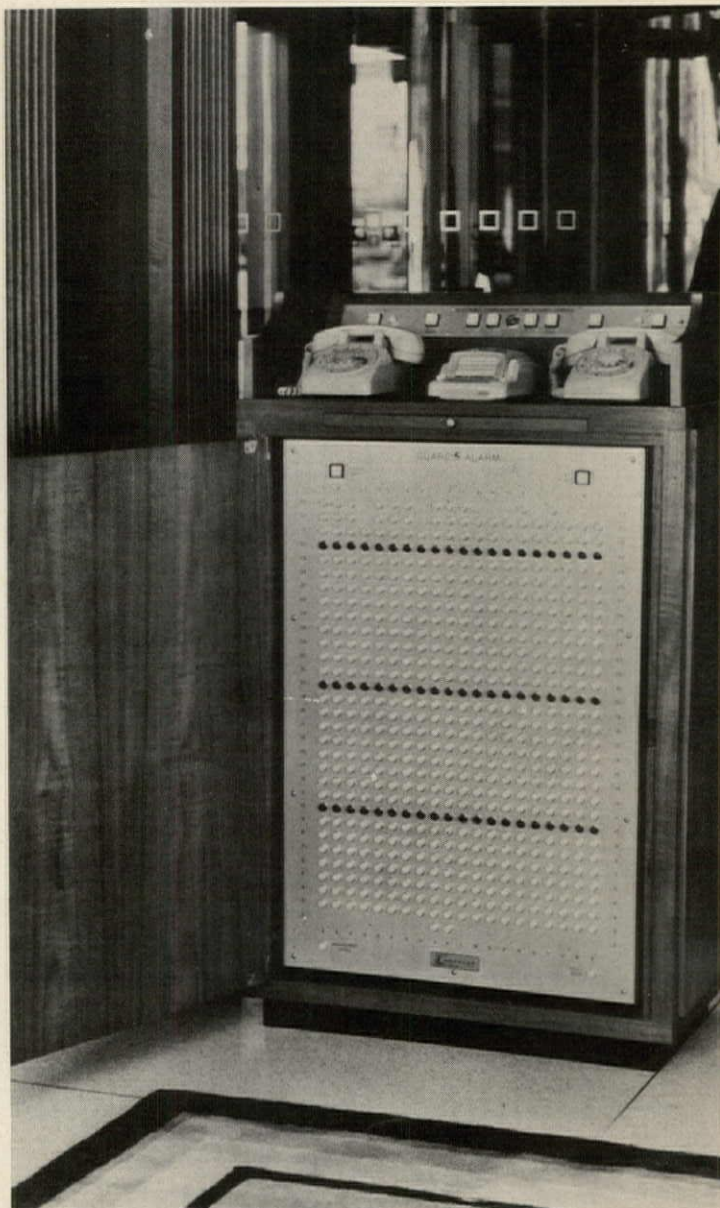
**Latching lock** of manufacturer's sliding glass door is purposely located on the inside of the door—putting it in the position most difficult to reach from the outside. Photo shows retractable locking pawls. Ador-Hilite, Fullerton, Calif.

Circle 285 on Reader Service card

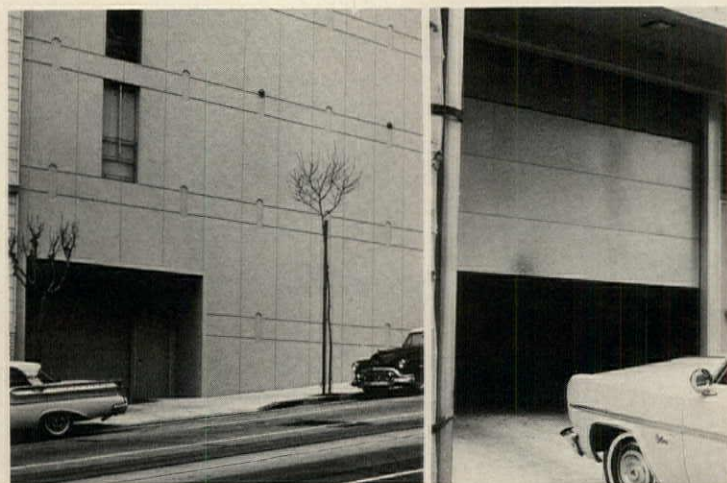


**Double-locking device** for double-hung and horizontal sliding wood windows prevents sash from being removed when window is locked in either a closed or open position (left). Lock is not visible from outside. Morgan, Long Grove, Ill.

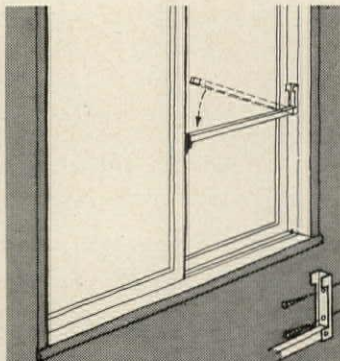
Circle 284 on Reader Service card



**Announcing system** for attended buildings can guard tenants' apartments electronically when they go out. If apartment door is opened, a buzzer sounds and a light flashes on the lobby console above. Loeffler, New York City. Circle 231 on Reader Service card



**Automatic garage-door opener** strictly controls entrance to apartment garage. It keeps door locked when not in use (left), opens quickly (right) when tenant approaching garage signals with pocket-size transmitter. Overhead Door, Dallas. Circle 232 on Reader Service card



**Locking device** for sliding glass doors is called a "Charlie bar." In position, it secures the door by bolting against opposite side of the frame. When bar is raised out of the lock position, door can slide back and forth. Yale & Towne, Rye, N.Y.

Circle 281 on Reader Service card



**TV camera**—shown outlined above—transmits what it sees to remote monitor screens watched by guards. Used above in apartment lobby, the unit is also suggested for hard-to-watch locations such as rear entrances and elevators. Honeywell, Minneapolis.

Circle 282 on Reader Service card



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*Carey*<sup>®</sup>

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## Solid Vinyl SIDING

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B. F. Goodrich Geon<sup>®</sup> Vinyl

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Our own *solid* vinyl siding in softly-rich colors: light gray, light green and white. Both 8" and double-4" type. Both types can be insulated on the job.

We believe this is the ultimate in siding for new homes and for older homes made new again. This siding won't rot, peel, dent or warp. It won't support combustion, won't conduct electricity, won't absorb moisture, won't rust or corrode. It's highly impact-resistant and insulates against cold, heat and noise.

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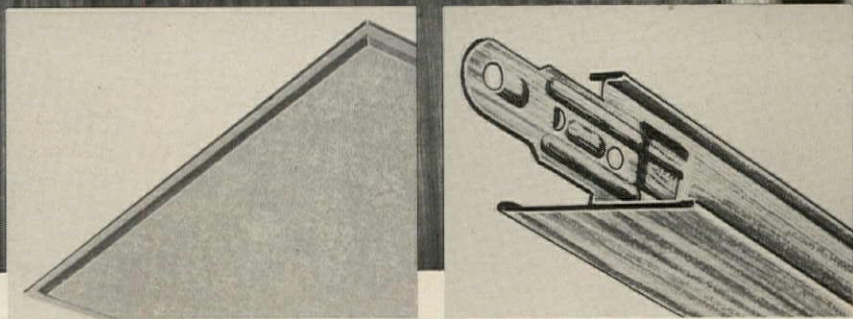
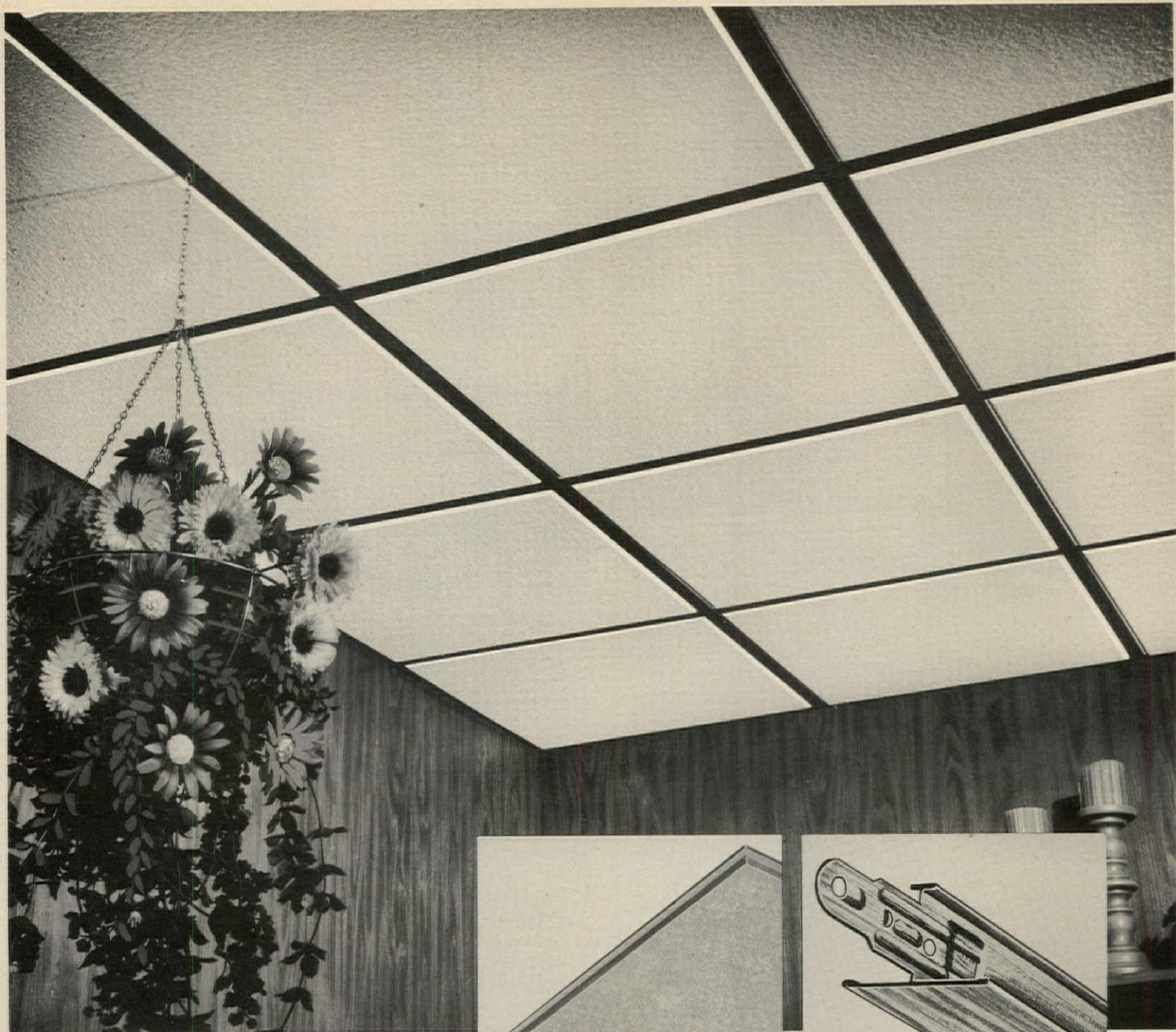


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**Install  
a modern  
low cost  
suspended ceiling...  
new wood-grain grid,**

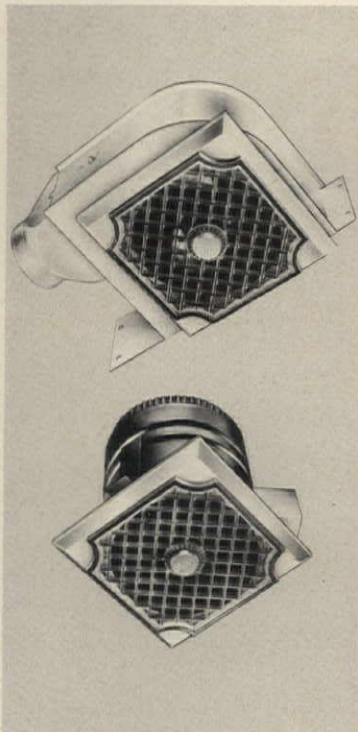
**new beveled edge panel from**

**Leigh**

**The new wood-grain grid, and the new beveled panel** are especially appealing in residential applications. The all-steel wood-grain grid adds a warmth and richness to rooms. Harmonizes beautifully with wood paneling. Actually coordinates ceiling with furniture. The new beveled panel—available in 2' x 2' and 2' x 4' sizes—is made of Leighfoam and is one of the lowest priced ceiling panels you can install. It drops four beveled edges below the surface of the grid to add depth, dimension and accent to ceilings. The grid, you should remember, is of the famous Leigh Klip-Lock design—field-proved in cutting installation time. No splice plates or connectors needed. Main tees and cross tees simply push-and-lock together. Slotted main tees space cross tees for you. Ask your supplier for these two new materials. Or for full information on the complete line of Leigh suspended ceiling materials—to help you plan more attractive, low cost, and labor-saving ceilings—write for our new color Bulletin 519-L.

Circle 11 on Reader Service card

# Leigh products help you cut costs all through the house... then help you sell it!



## 6" decorator fans styled for today

Elegant white and gold 7" grille of these small fans makes them perfect for wall or ceiling use in bathrooms, powder rooms, basement bars, and in mobile home applications. U.L. approved. Can't burn out, even if accidentally stalled. Guaranteed for a full year. See your supplier.

Circle 12 on Reader Service card



## The magic of mirrors

can work for you. Functionally and economically—with Leigh mirrored Full-Vu closet doors. Install them to make rooms appear larger, brighter, more attractive. Bi-fold door shown. Pivoted wardrobe door also available. Smooth, silent operation—quick, easy installation. Call your supplier.

Circle 13 on Reader Service card

## You save installation costs with steel shelves

You don't saw, cut, fit, plane, sand or finish. Just install... and save. At right

—Leigh storage shelf is used for top shelf. Next shelf beneath is a closet-shelf and rod combination.

Shorter storage shelves with offwall brackets are used for two bottom shelves.

For full information write for Bulletin 489-L.

Circle 14 on Reader Service card



*Leigh makes more than 160 products for the building industry*



## LEIGH PRODUCTS, INC.

2568 LEE STREET, COOPERSVILLE, MICHIGAN 49404

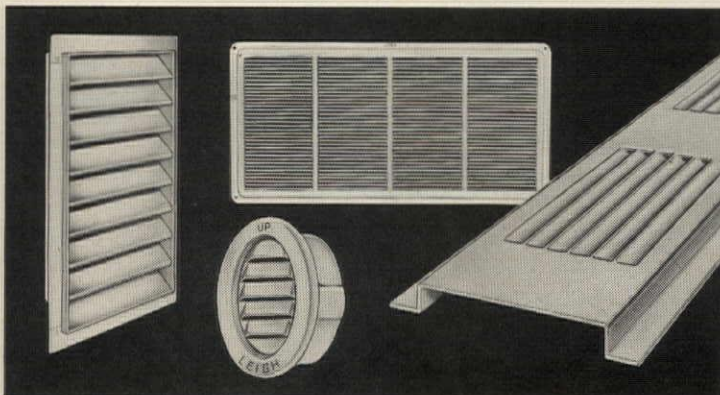
East Coast Warehouse: Leigh Corp., Edison, New Jersey. West Coast Warehouse: Leigh Industries, Inc., City of Commerce (Los Angeles), Calif. Made in Canada by Leigh Metal Products Ltd., London, Ontario. Western Canada Sales Agency: E. H. Price Ltd., Winnipeg, Edmonton, New Westminster, Calgary.



## Door knockers with built-in viewers

give homeowners the vital safety feature of a Leigh thru-the-door, wide-angle, optical viewer set in an attractive door knocker. Protection against unwelcome callers! Inexpensive. A house-selling plus! Optional namecard holders. Small models for apartment doors.

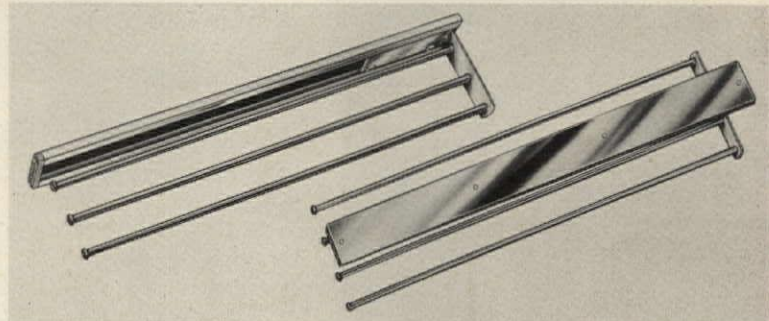
Circle 15 on Reader Service card



## Leigh pre-finished white ventilators

save time and end paint problems. Raw aluminum ventilators are difficult to paint on the job. What's worse, the paint often peels off in a short time. Leigh white ventilators have a baked-on enamel prime coat. No chipping, no peeling. Ideal with wood siding or aluminum siding. Ask your supplier for white attic vents, under eaves vents, miniature vents or Trimvents—all by Leigh.

Circle 16 on Reader Service card



## Sliding towel racks

Leigh towel racks move easily on 4 nylon glides. Keep towels out of the way, yet quickly accessible. Inexpensive — but a finishing touch appreciated by the home buyer. Heavy-gauge steel. Bright chrome plated. Side or top mounting—both styles 20 1/4" long. Remember, Leigh makes many allied products you build into kitchens and interiors: milk and package receivers, pocket door hardware, sliding door hardware, clothes chute doors. All are priced right and made to save your installation time. Be sure to see them at your supplier—or write for the current Leigh Catalog 800-L.

Circle 17 on Reader Service card

Circle 18 on Reader Service card

**SCHLAGE HELPS YOU ANSWER—**

## **What people desperately want today...**

SECURITY—that's what people are anxious about. In their homes...in hotels, motels and apartments...in offices and plants throughout the country.

Security is, of course, Schlage's business. It has been for over forty years of research, development and the manufacturing of better door locks.

We first met the challenge by inventing the cylindrical lock. And as the needs for security have become more severe, we have kept on improving and perfecting our original and unique lock design.

We've developed finer quality materials and systems of manufacture: Special strip steels rolled to precise specifications...the closest tolerances in the industry...and kept our whole line under constant, rigid inspection.

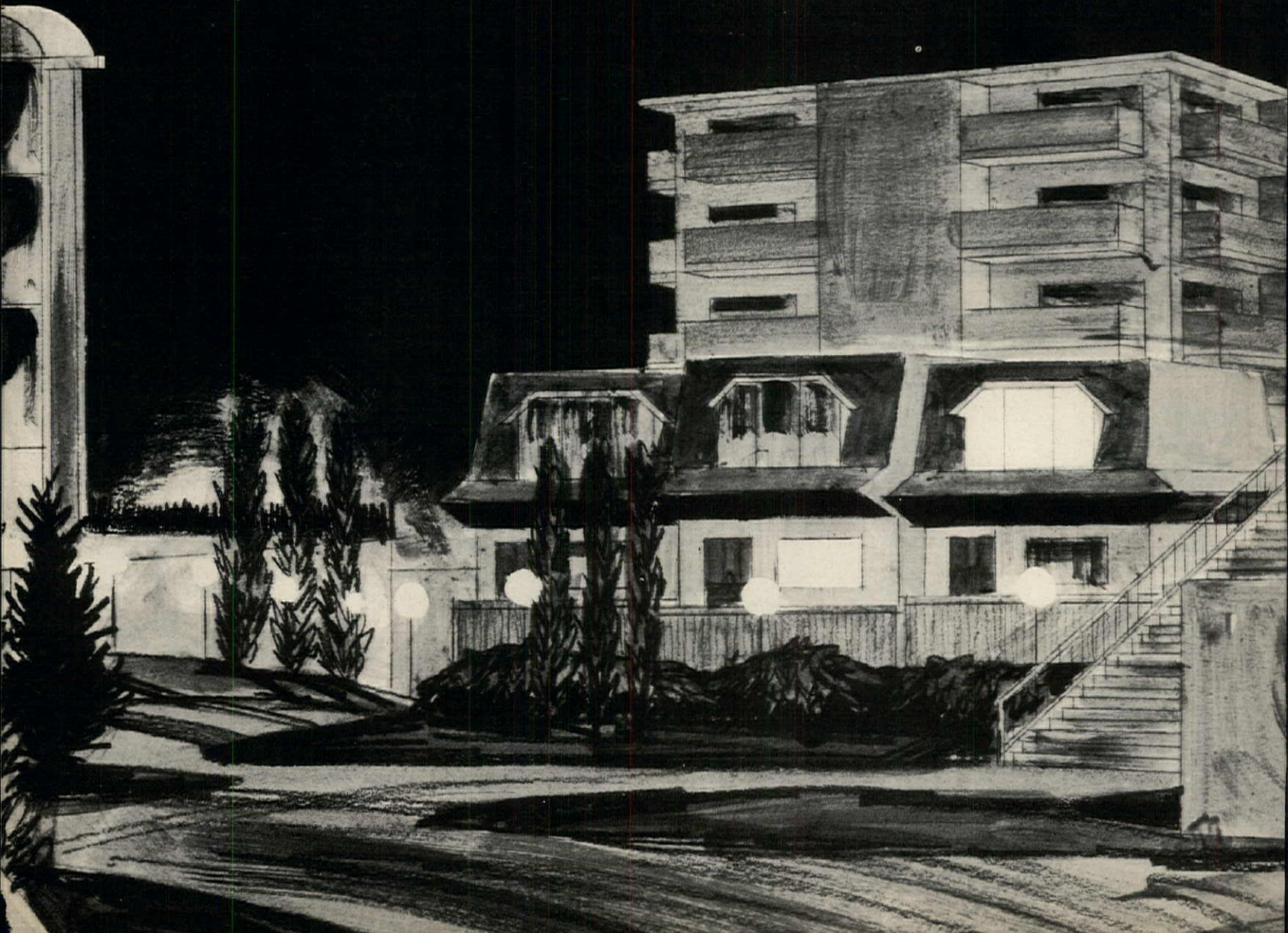
So today, Schlage recognizes the greater needs and wants for security—and can provide greater answers than ever.

Take, for example, the new *SCHLAGE DOUBLE SECURITY ENTRANCE LOCK*. As described at right, this is real security!

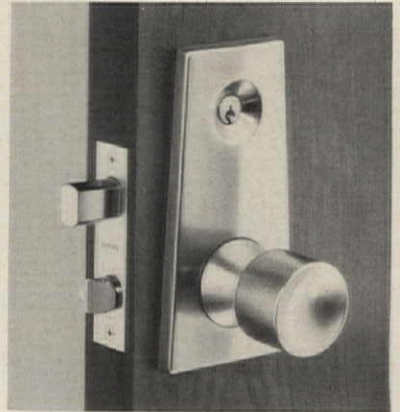
Security underlies many Schlage locks which are specialized for different needs—for all residential and commercial applications. Attractive finishes, too, are diverse and readily available.

Naturally, Schlage locks cost a little more. But since there is little upkeep or maintenance cost, they soon pay for themselves.

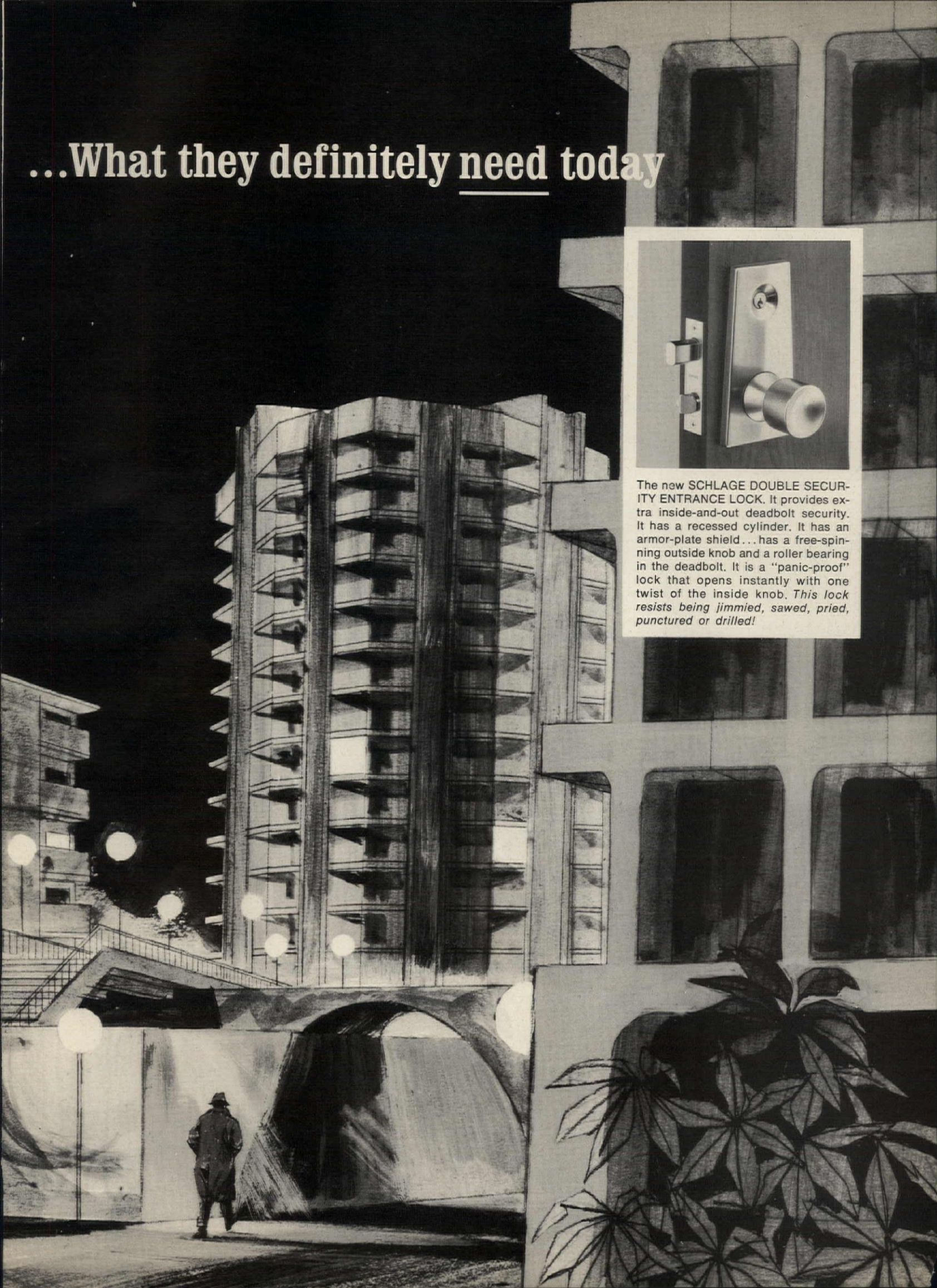
**SCHLAGE**  
**LOCK COMPANY**  
SAN FRANCISCO • VANCOUVER B.C.

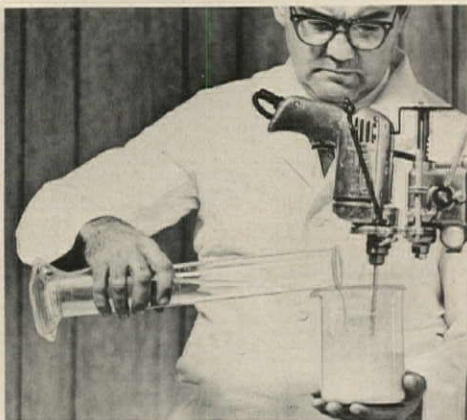


...What they definitely need today

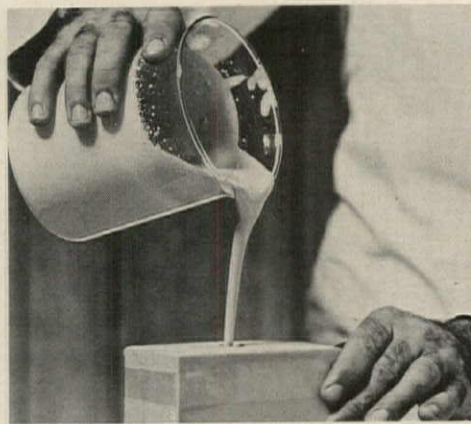


The new SCHLAGE DOUBLE SECURITY ENTRANCE LOCK. It provides extra inside-and-out deadbolt security. It has a recessed cylinder. It has an armor-plate shield... has a free-spinning outside knob and a roller bearing in the deadbolt. It is a "panic-proof" lock that opens instantly with one twist of the inside knob. *This lock resists being jimmied, sawed, pried, punctured or drilled!*





**WATER** is added to special polyester resin in precise quantities ranging from 50% to 80%.



**EMULSION** of water and resin is adaptable to on-site pouring as well as to assembly lines.



**MOLD** can be removed ten minutes after pouring. Metal, glass, wood or rubber molds may be used.

## New water-mixed plastic promises to cut costs of molded trimwork



**PLASTIC TRIMWORK** is already used by prefabbers. Above: a Kingsberry Homes molded lintel.

Cost savings may be as much as 50% compared with the cost of conventional polyester resins. And—says the inventor-manufacturer, Ashland Chemical Co. of Columbus, Ohio—the new water-resin material doesn't look like plastic but more like plaster or cement. Ashland calls it WEP (for water-extended polyesters).

WEP should be ideally suited to molded-plastic trimwork (*left*), which prefabbers such as Scholz Homes and Kingsberry Homes use extensively in packaged houses. It resists freeze-thaw cracking down to  $-30^{\circ}\text{F.}$ , has tensile strength equal to that

of wood, permits painting with conventional coatings and can be machined and nailed. Strength is determined by the amount of water used in the poured emulsion. End-product cost for the strongest formulation—i.e., 50% water—is \$6 to \$8 a cu.ft.

Castings of any volume and thickness can be made with WEP because its water content keeps heat buildup from exceeding  $190^{\circ}\text{F.}$  WEP is also fast: Parts can be demolded in ten minutes after the emulsion has gelled and strength is largely developed in less than 60 minutes.



**1. SANDING MACHINE** roughens old linoleum in a narrow strip around perimeter of kitchen.



**2. CEMENT** is spread only on sanded strips, which include seam lines as well as perimeter.



**3. NEW VINYL** is installed in precut sheet and then hand-rolled to fill seams with cement.

## Quick coverup for old kitchen floors streamlines apartment remodeling



**TWO-PART ADHESIVE** is blended on the job. The amount shown covers a 4" strip 35' long.

Quick coverup means just that: You cement new sheet vinyl directly to old resilient flooring instead of peeling it up and sanding smooth the leftover cement underneath. A high-strength adhesive makes the system possible, but it should be used only with certain heavy-gauge sheet vinyls. And the old flooring, needless to say, should be firmly bonded.

The adhesive is spread in a 4"-wide strip around the perimeter of the old floor and wherever seams are to fall. The strip is laid out beforehand and lightly sanded. After the new flooring is laid, it is hand-rolled to

create a tight barrier against dirt and water by forcing adhesive into and through the seams.

Metropolitan Life Insurance Co. has been giving the method a dramatic tryout in replacing 20-year-old kitchen floors in more than 12,000 of its New York City apartments. Using 17 installation mechanics, Metropolitan replaces floors at rates of up to 58 apartments a day. Its reason for using the coverup adhesive system—marketed by Armstrong Cork Co.—is not only to save time but to avoid the mess of sanding concrete floors.

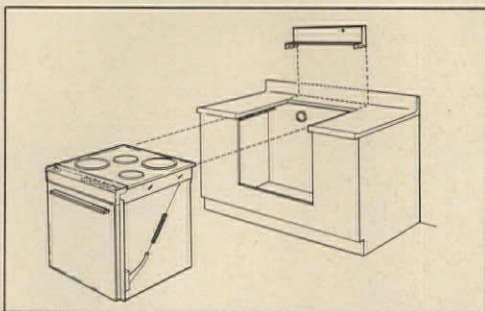
## Frigidaire brings you...

**more help in selling today's prospects who demand easy-clean kitchens.**

You probably know the hottest, most wanted idea in built-ins. The Electri-clean Oven idea. Now it's yours in a Frigidaire Compact 30 range. In just 30" of space, you can add a complete, contemporary cooking center. Surface units. Automatic controls. Plus an oven that goes from dirty to clean automatically. Cost per cleaning for your prospects: just about the same as a cup of coffee. This is the range for kitchens that create more leisure, not more work.

**more help with fast, easy installation.**

We know installation time is money. Your money. We try to save you both. Example—the Compact 30 installs with just 4 screws.



An easy-to-follow installation guide is yours for sub-contractor use on this and every Frigidaire built-in.

**more help with customer satisfaction . . . factory-trained service available everywhere.**

Coast to coast, one of our authorized service outlets is available to take over the service responsibility. You're free to concentrate on building and selling. This is another reason Frigidaire-equipped kitchens can help you build traffic. Boost rentals. Or close sales. Call your Frigidaire representative and let him show you.



**Frigidaire  
bothers to  
build in  
more help**

## help your prospects clean up...

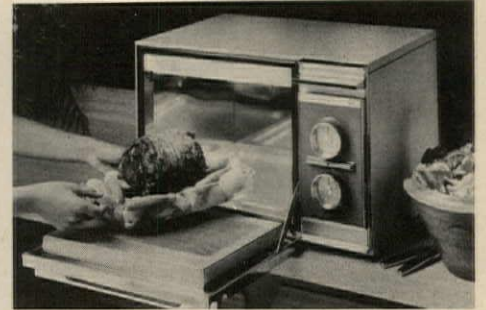


Model RBE-539N

## NEW PRODUCTS

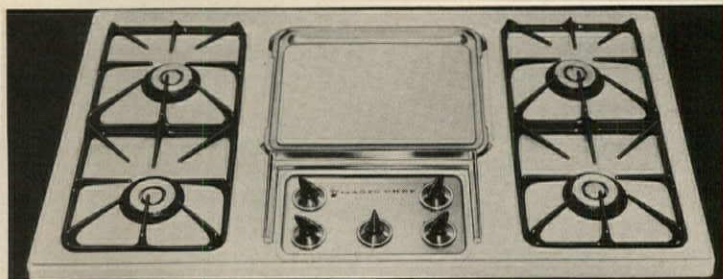
For more information, circle indicated number on Reader Service card, p. 117

### Kitchens

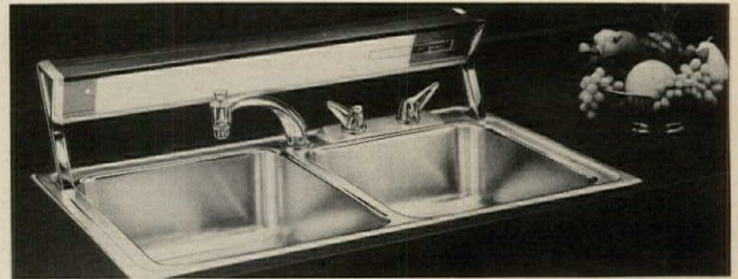


#### This microwave oven can bake a potato in only four minutes

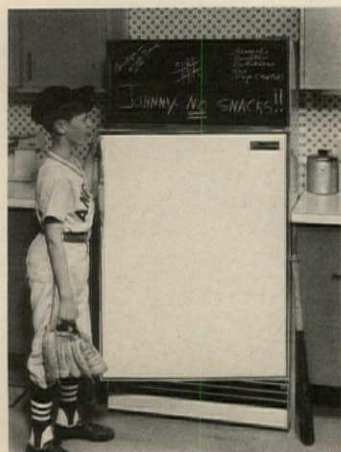
Instead of cooking with conventional radiant heat, it uses high-frequency radio waves that heat only the food itself. Result: a 5-lb. roast is done in only 37½ minutes. The all-electronic unit, which plugs into any 115-volt outlet, cannot cook conventionally. Its manufacturer explains that it is designed to supplement—not replace—conventional ranges. The unit fits under kitchen base cabinets—it takes up no more space than many portable TV sets—or can be built in (photo, left). Price tag: about \$500. Amana Radarange, Amana, Iowa. Circle 280 on Reader Service card



**Gas surface unit**—36" wide, 22" deep—includes a built-in griddle that converts to a fifth burner. The unit is shallow enough to permit room for drawer space underneath. In brushed chrome, coppertone, avocado. Magic Chef, Evansville, Ind. Circle 206 on Reader Service card



**Stainless steel sink** incorporates a full-width fluorescent light that doubles as a night light. The sink's oversize left compartment accommodates bulky broiler and roaster pans. Elkay, Broadview, Ill. Circle 207 on Reader Service card



**Refrigerator-freezer** shown above is a standard model with the freezer-door finish converted to a blackboard. The unit's decorator-front feature allows any ¼"-thick material to be substituted for standard door panel. Whirlpool, Benton Harbor, Mich. Circle 208 on Reader Service card



**Pull-out baskets** for convenient storage of fruits and vegetables are mounted on glide-out racks in a 15"-wide cabinet. The white plastic baskets—each 5½" high and 17" long—glide out individually. Air openings keep food fresh. Long-Bell, Portland, Ore. Circle 209 on Reader Service card

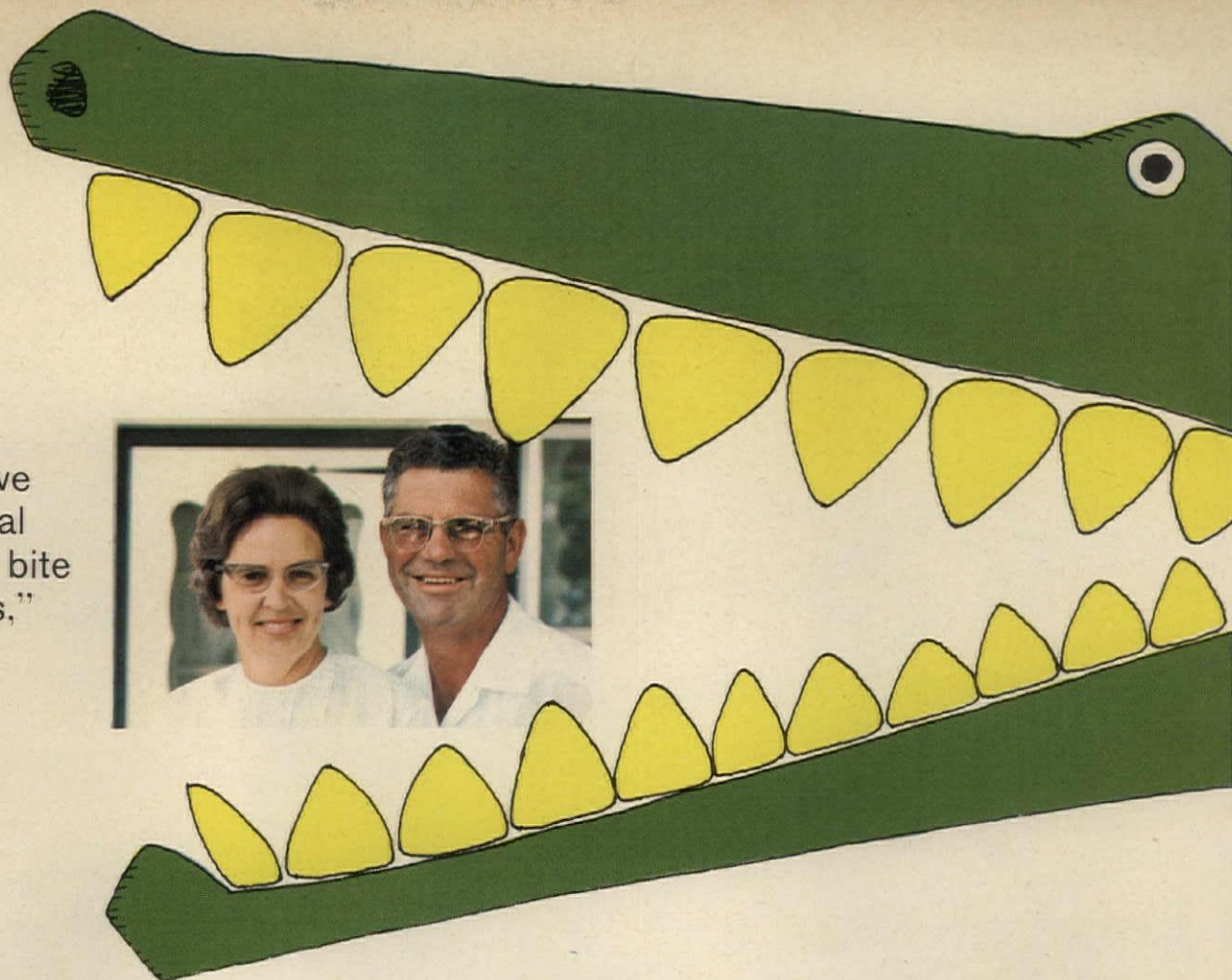


**Electric range** with a self-cleaning oven has built-in exhaust system that filters out fumes, cooking odors and grease. The underside of the unit's elevated control console houses a pair of infrared lamps to warm food. Frigidaire, Dayton, Ohio. Circle 211 on Reader Service card



**Solid vinyl countertopping** in textured and smooth surfaces can be cut and bent readily during installation. The wearing surface has the advantage of being repairable—small scratches can be rubbed out with steel wool. Goodyear, Akron, Ohio. Circle 210 on Reader Service card





"In conventional building, excessive labor and material costs took a big bite out of our profits," say *Ralph and Marge Smurr.*

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Kingsberry's "Wynngate," as built by Ra-Mar Builders, Pickerington, Ohio.

This story by seasoned builders would fit on the head of a nail in two words: *more profit.*

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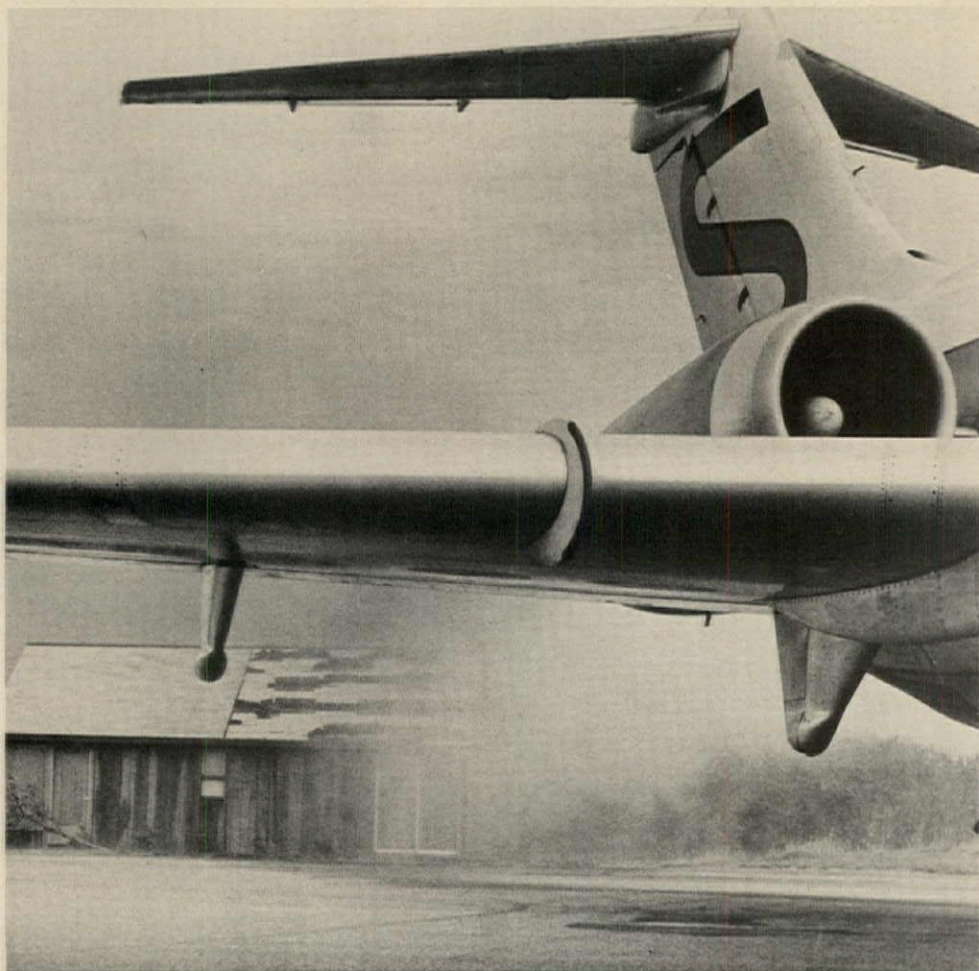
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**Exteriors**



**JET AIRLINER** is positioned 100' from specially built test house alongside airport runway.



**KNEELING FIREMEN** aim firehoses into plane's jet stream to simulate heavy rains. Wind: 100 mph.

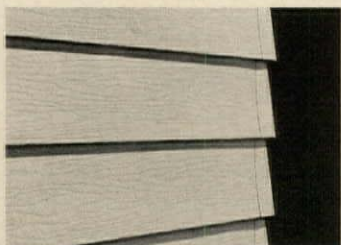
**Unique test for seal-down shingles: a man-made hurricane**

Byrd & Son developed the test to compare the wind-resistance of their self-sealing shingle with that of conventional shingles. Although shingles need only resist 60 mph winds for two hours in order to be UL-listed as wind-resistant, Byrd used a DC-9, 90-passenger jet to create hurricane-force winds upwards of 100 mph (*photo sequence, right*). Their self-sealing shingle held through a score of ten-minute tests, while the conventional shingles tore.

This was the first time self-sealing shingles—which are fused to the roof with heat-activated adhesive—had been so tested. A UL spokesman called it a “good” test, although “perhaps not as controlled as what we run.” And although satisfied with the attention the test received, a Byrd spokesman suggested recently that cost might prohibit a repeat effort. Byrd & Son, East Walpole, Mass. *Circle 283 on Reader Service card*



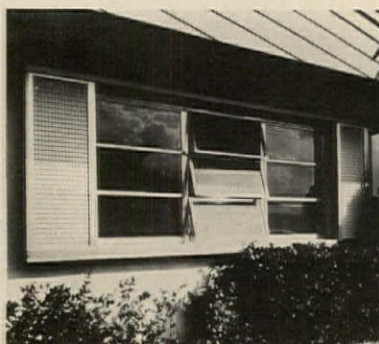
**SEVERAL COURSES** of conventional shingles are raised by winds. Wind-seal shingles remain flat.



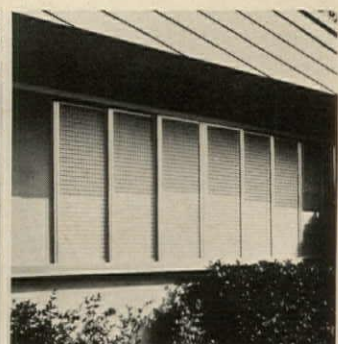
**Textured metal siding** is embossed to look like rough-sawn wood. The pattern is available in polyvinyl-chloride and acrylic finishes on 8"-exposure steel and aluminum panels, and on 12" vertical board-and-batten steel panels. Mastic, South Bend, Ind. *Circle 245 on Reader Service card*



**Vertical siding** of solid aluminum textured to simulate rough-sawn plywood is guaranteed for 20 years against rust, flaking, chipping or blistering. The 16" x 9'4½" panels are protected by an exclusive finish. Kaiser, Oakland, Calif. *Circle 246 on Reader Service card*



**Vented-aluminum shutters** can be opened and closed from inside: Shutters nest at both sides of window (*above, left*), then slide out and lock in place (*right*). Small vents in slats allow air to pass through but reduce sun penetration by nearly 90%. Weather Control Shutters, Hollywood, Fla. *Circle 247 on Reader Service card*



Hard surfaced recreational areas are ideal. From a maintenance standpoint.



Recreational areas with hard surfaces are built to take the awful beating kids hand out.

Unfortunately kids aren't built to take the beating hard surfaces hand out.

And if you use grass, the grass soon turns to dirt or dust or mud.

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So the next time you specify a recreational surface that has to take an awful beating, make sure the people using it won't have to take an awful beating too.

**AstroTurf®**  
Monsanto Recreational Surfaces

For more information, write to AstroTurf Recreational Surfaces, Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, Missouri 63166. Or refer to Sweet's Architectural File, 361 Mo





**Vinyl-asbestos tiles** that simulate slate are deeply grouted for textural interest. Individual tiles are 1/8" thick, come 12" square in color choice of either blue-grey or red. Johns-Manville, New York City. Circle 200 on Reader Service card

# Colonel Logan

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Profusely illustrated, new book shows how little touches of iron create sales-sparking magic indoors and out.



**Deeply embossed tiles** of vinyl asbestos are textured to look like travertine in four colors, including brown and olive. The pattern is offered in 12"x12" tiles, 1/8" thick. GAF-Ruberoid, New York City. Circle 201 on Reader Service card



**Textured indoor-outdoor carpeting** of 3-ply, polypropylene-olefin yarn resists stains and damage from both sun and rain. The dense carpeting features a tweed design and is offered in lawn green. Bigelow-Sanford, New York City. Circle 202 on Reader Service card

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New products continued on p. 119



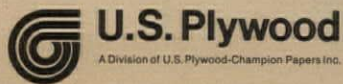
**Closet stuffers can get into their stuffed closets a lot easier with U.S. Plywood folding doors.**

Put sliding doors on a closet like this one. Know what you have when you want to get something out? About half a closet. Take the same closet and put U.S. Plywood folding doors on it.

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Now what have you got? Something any prospect inter-

ested in getting in their closets will thank you for: Closet doors that open all at once, all the way. Ready to install, U.S. Plywood folding doors come paneled, mirrored, louvered and in combinations of mirrored/louvered at your Building Supply Dealer.



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## We don't make people eat cold meals.

This new Tappan Gallery range has a built-in electric warming shelf.

It keeps food hot for slowpokes and second helpings. Warms plates, too. (A little feature like this can sell a whole house.)

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This Tappan Self-Cleaning oven removes all spills and spatter automatically—far better than she could by hand.

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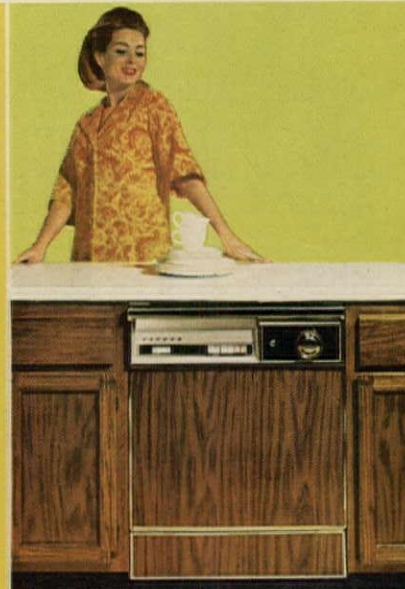
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**Tappan Renaissance II Range** has two big ovens. Available in gas or electric. (We don't make you disappoint a single prospect.)

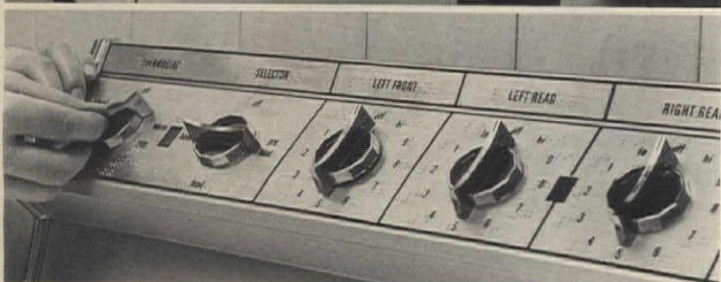
**Tappan Side-by-Side Refrigerator and Freezer** holds a world of food. And has quick-change front panels that let her be creative.

**Tappan Reversa-Jet Dishwasher** gets dishes far cleaner with 2-way washing action. (We don't make her rinse them off first.)

**Tappan Built-in Electric Ovens** make your best kitchens look even more luxurious. Optional lift-out liners for convenient, easy cleaning.



**Kitchens**



**Specially designed electric range** for use by the blind incorporates a Braille control panel with raised dots (*directly above*) that adjusts oven and surface elements. No price premium over equivalent standard model. Admiral, Chicago. *Circle 203 on Reader Service card*



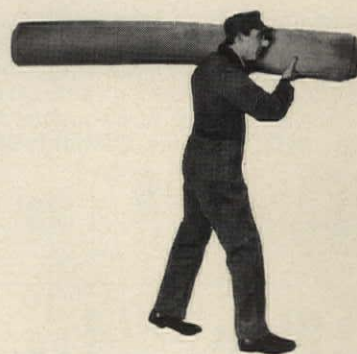
**Glass-ceramic work surface** that fits flush into kitchen counter-tops is now offered in an 11"x15" size for apartment kitchens and other compact cooking areas. Panel can be installed with or without steel rim. Corning Glass, Corning, N.Y. *Circle 204 on Reader Service card*



**Extra-capacity portable dishwasher** is just the right height—34½"—to slide under counter, has a faucet connector (*right*) that snaps on and off with one hand. Front hookup permits operation from under counter. Maytag, Newton, Iowa. *Circle 205 on Reader Service card*

*New products continued on p. 120*

# Builders replace wall-to-wall headaches



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## NEW PRODUCTS

start on p. 110

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Circle 81 on Reader Service card



**Plastic-finished wall paneling** features an avocado-swirl pattern designed to harmonize with avocado kitchen and bathroom fixtures. The 4'x8' panels can be sawed, drilled or nailed. Abitibi, Birmingham, Mich. Circle 221 on Reader Service card

### "Showers of Diamonds"



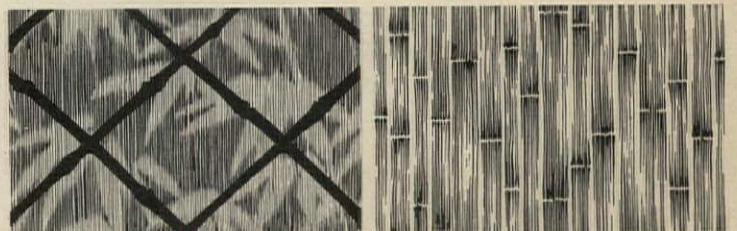
### Fountains by RAIN JET

Thousands of crystal-like droplets capture the color and brilliance of underwater lighting by night and become a shower of diamonds. Thousands in use in homes, industrial and office buildings, banks, restaurants, stores and motels as well as gardens and parks.

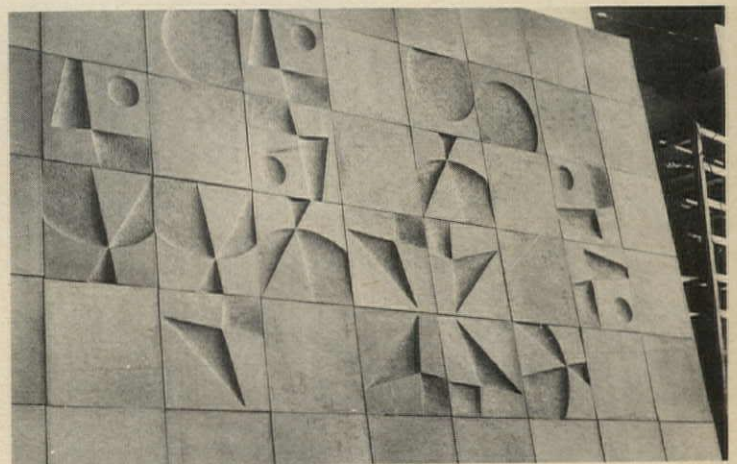
Complete fountain, including 3-ft. bowl, recirculating aqua-vator and underwater lighting from \$199.50. Other size bowls to 8-ft. No plumbing needed. Just provide electrical connection and fill bowl with water. Send for free full-color literature... or for full-color 3-D Viewer (\$1.00).

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Circle 82 on Reader Service card



**Oriental-patterned wallcoverings** that complement each other are both available in choice of olive on gold, black on white, or green on white. The wallcoverings are fully trimmed and vinyl-coated. United Wallpaper, Chicago. Circle 224 on Reader Service card

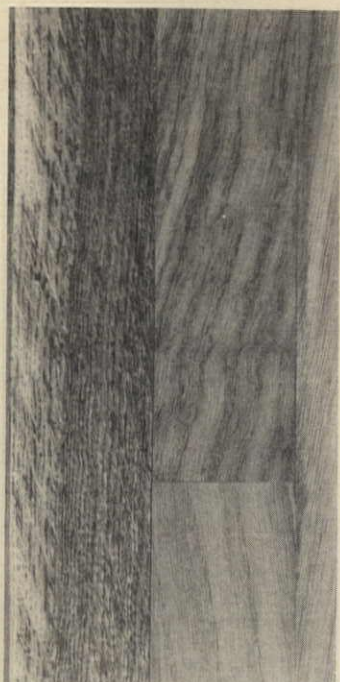


**Ceramic wall mural** is hand-textured in modular units—12"x12"x1/8"—in natural clay colors such as taupe grey, terra cotta and tan. Manufacturer custom-designs accent walls from more than 100 basic patterns. Design Technics, New York City. Circle 226 on Reader Service card

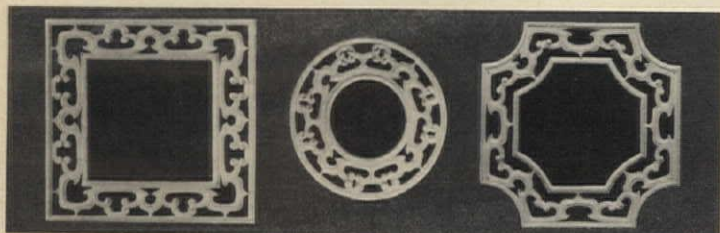




**Tapestry-like wallcovering** comes with choice of sand-textured or flocked overlays that emphasize its design. The pattern shown is one of 17 new designs recently introduced, in both vinyl-coated wallpaper and vinyl. James Seeman, Garden City Park, N.Y. Circle 222 on Reader Service card



**Rugged surfacing** consists of 2"-wide hardwood veneers (in choice of 50 wood species) glued to a fabric backing. The surfacing, reminiscent of a butcher block, is pliable. It can be applied around edges. Laminating Services, Louisville. Circle 223 on Reader Service card



**Sculptured plastic appliques** that simulate hand-carved detailing are formulated from fiberglass-reinforced plastic, in widths from 6 $\frac{3}{4}$ " to 15 $\frac{3}{4}$ ". They are offered in six styles. Noble, Los Angeles. Circle 225 on Reader Service card



**Embossed wall paneling** looks like rough-hewn planks of weathered wood. The  $\frac{1}{4}$ "-thick, random-grooved hardboard panels are 4'x8', can be applied to studs, furring strips, plaster or wallboard with nails or adhesive. Armstrong, Lancaster, Pa. Circle 227 on Reader Service card

*It's Beautiful!..*

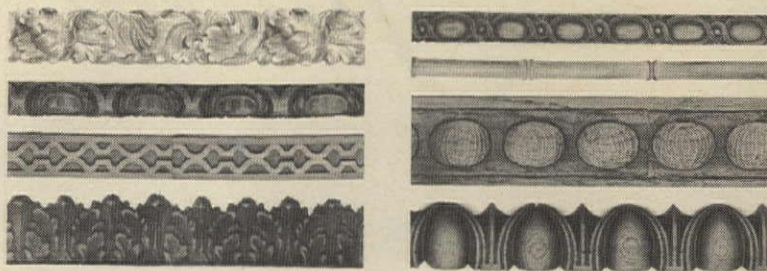
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Circle 83 on Reader Service card

121

*New products continued on p. 122*

## NEW PRODUCTS

start on p. 110

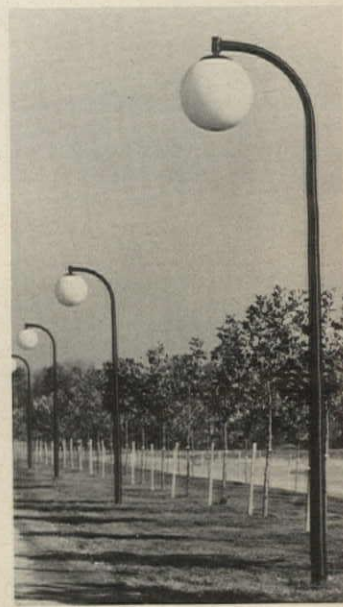
### Lighting



**Ceiling fixture**—the same size as a standard 12"x12" ceiling tile—is easily inserted in place of a tile (*above*) during ceiling installation, eliminates cutting and fitting. It has a woodgrained lens frame. Armstrong, Lancaster, Pa. *Circle 215 on Reader Service card*



**Traditional lantern**—suggested for residential use on streets where homes are predominantly traditional—is cast aluminum with acrylic side panels. The lights have built-in ballasts, use 100- or 175-watt mercury lamps. Westinghouse, Cleveland. *Circle 218 on Reader Service card*



**Contemporary luminaires** for outdoor lighting include integral ballasts, permit the use of direct burial or anchor-base poles. The globe-style luminaires can use any size mercury lamp: 75, 100, 175 or 250 watts. Sylvania, New York City. *Circle 219 on Reader Service card*

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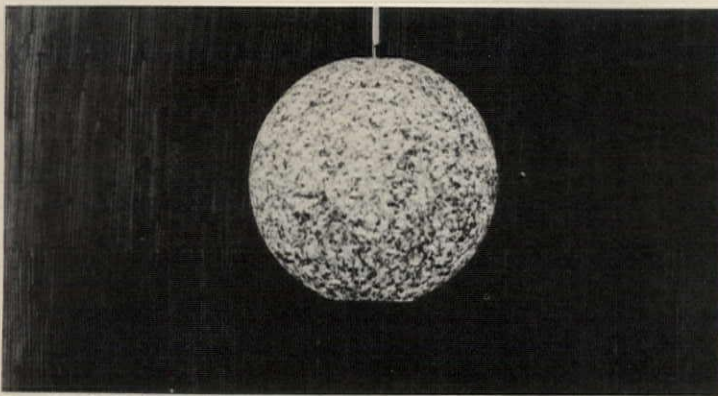
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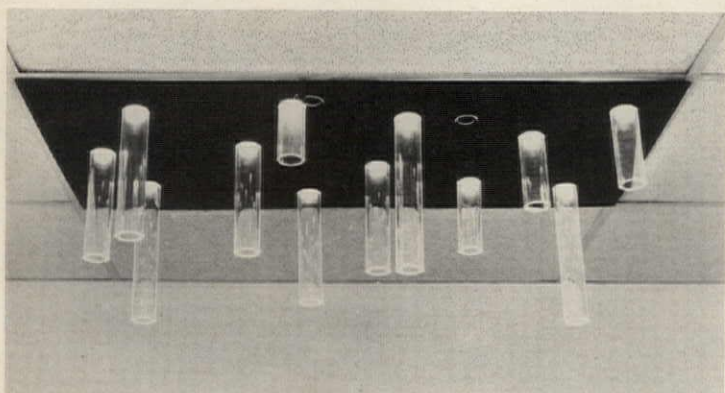
Company \_\_\_\_\_

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**Pendant fixture** is easy-to-clean bonded polyethylene, claimed to be unbreakable. The globe fixture accommodates a single 100-watt lamp and is offered in choice of white, coral or turquoise. Emerson Electric, St. Louis. *Circle 216 on Reader Service card*



**Sculptured ceiling light** consists of 12 clear-acrylic tubes of different lengths—the longest about 12"—set into a black-acrylic sheet. The complete fixture is about 5" thick, is lit by fluorescent lamps. Trimble House, Atlanta, Ga. *Circle 217 on Reader Service card*



**French-styled pendant** features an elongated oval shape in white shirred glass and has an ornate metal top and chain. The fixture is 16" high, 7" in diameter, and can be hung up to 36" from the ceiling. Thomas, Louisville. *Circle 220 on Reader Service card*

*New products continued on p. 124*

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*Circle 85 on Reader Service card*

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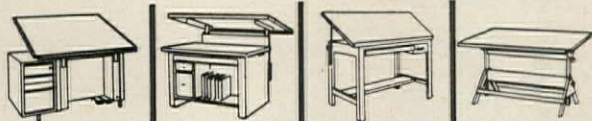
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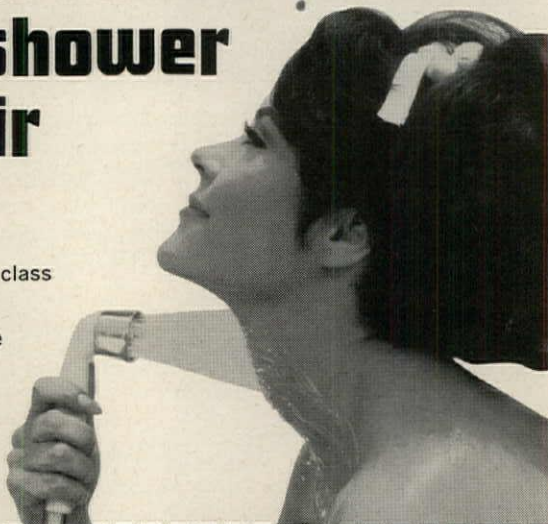
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Circle 87 on Reader Service card

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Circle 88 on Reader Service card

## NEW PRODUCTS

start on p. 110

### Lighting

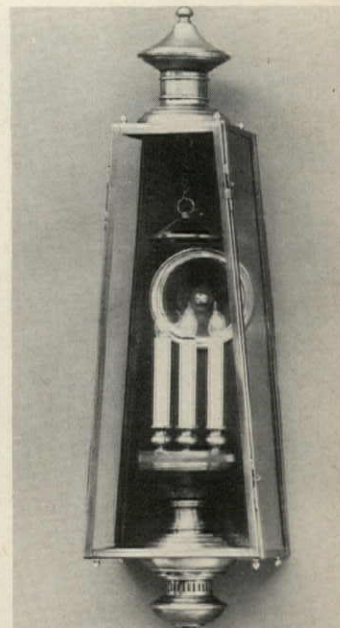


**Large fluorescent fixture**—originally designed for commercial use—is now available for homes. It comes in two- and four-lamp sizes, gives excellent but diffused light through an acrylic or styrene lens. Smithcraft, Chelsea, Mass. Circle 243 on Reader Service card



**Scrolled wall bracket**, a Mediterranean-style fixture in black wrought iron, has textured amber-glass panels. The fixture uses one 40-watt flame lamp; it is 17¼" long, 12" wide, and projects 12¼". Emerson Electric, St. Louis.

Circle 244 on Reader Service card



**Unusual wall lantern** with three candelabra lamps can be used both indoors and out. The fixture is offered in a choice of weathered brass or copper with clear glass. Dimensions: 9½" wide, 34½" high. Artolier, Garfield, N.J.

Circle 242 on Reader Service card

New literature starts on p. 126

# House & Home ADVERTISERS' INDEX

Page		Page		Page	
22	Abitibi Corp.	7	Kardon Investment Co.	123	Ventarama Skylight Co.
118W1	Ador Corp. (Sub of Rusco Industries, Inc.)	111	Kingsberry Homes		
118M1	Alliance Mfg. Co.	16, 17	KitchenAid Home Dishwasher Div. (Hobart Mfg. Co.)	4	Waste King Universal (Norris Industries, Inc.)
124	Alsons Products Corp.	48, 49	Kohler Company	4th Cov., 118E3	Weyerhaeuser Co.
122	Am-Finn Sauna, Inc.	15	Kwikset (Division of Emhart Corp.)	20, 21	Whirlpool Corp.
56, 57	Anaconda American Brass Co.	39	Kyova Pipe Co.	118W2	Wood Components Co.
130, 3rd Cov.	Armstrong Cork Co.			127	Wood-Mosaic Corp.
31	Artolier (Div. of Emerson Electric)	104, 105	Leigh Products, Inc.		
		118W4	Leslie Welding Co., Inc.		
123	Bangkok Industries	128, 129	Libbey-Owens-Ford Glass Co.		
51	Berns Air King Corp.	27	Lite-Beam Div. (Am-Finn Sauna, Inc.)		
22	Blu-Ray, Inc.	114	Logan Co.		
43	Bruce Co., Inc., E. L.	121	Luron Industries Inc.		
40, 41	Bryant Manufacturing Co.				
		26	Majestic Co., Inc.		
118W6, SW2	C F & I Steel Corp.	118E4, M3, N3	Malta Mfg. Co.		
19	California Redwood Association	44	Mississippi Glass Co.		
33	Caradco, Inc.	24, 25	Moe Light Division (Thomas Industries, Inc.)		
46	Cast Iron Pipe Research Association	99	Moen Division (Standard Screw Co.)		
23	Cavrok Mfg. Co.	113	Monsanto/Astrotrurf		
28, 29	Celotex Corp.				
58	Chrysler Corp./Airtemp	1, 2	NuTone		
32	Cole Valve Corp.				
2nd Cov.	Congoleum-Nairn, Inc.	52, 53	Overhead Door Corp.		
118W4	Cornell-Newton, Inc.				
45	Corning Glass Works	101	Paslude Co.		
118E1, N5 S3	Crown Aluminum Industries Corp.	118S4	Peachtree Doors		
		103	Philip Carey Mfg. Co., The		
		120	Plan Hold Corp.		
126	Duo Fast Fastener Corp.				
38	Duraflake Co.	120	Rain Jet Corp.		
		118S1, SW1	Rangaire Corp.		
10, 11	Edison Electric Institute	118M2, N1	Raynor Manufacturing Co.		
		13	Red Cedar Shingle & Handsplit Shake Bureau		
127	Flexicore Co., Inc.	50	Rez Co.		
37	Float-Away Door Co.	118M4	Rowe Mfg. Co.		
118S4A, S4B	Florida Gas Transmission Co.				
59	Formica Corp.	106, 107	Schlage Lock Co.		
109	Frigidaire Division (General Motors Corp.)	118E2, N6	Schumacher Co., F. E.		
		55	Simpson Timber Company		
30	Grote Manufacturing Co.	118W3	Southern California Edison Co.		
		124	Stacor Corp.		
60	Harcraft Brass	118E4A-E4B	Symmons Engineering Co.		
119	Harris Manufacturing Co.				
42	Home Comfort Products Co.	116	Tappan Co.		
34, 35	Hotpoint Division (General Electric Co.)				
118N2, S2	Housing Education & Research Institute	47, 115	United States Plywood Corp.		
39	In-Sink-Erator Manufacturing Co.				
118W5	International Pipe & Ceramics Corp.				

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TO HOLD FAST  
Everything you need for tacking, stapling and nailing.

## NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card, p. 117

**ELECTRIC TOOLS.** Electric drills, power saws, sanders, bench grinders and impact wrenches are displayed and discussed in a 16-page catalog that also includes accessories. Thor Power Tool Company, Aurora, Ill. *Circle 305 on Reader Service card*

**ALUMINUM EXTRUSIONS.** Guide explains what an extrusion is, how it's made, why and where it can be used. Booklet also includes useful technical data on commonly used extrusion alloys, 30 pages. The Aluminum Assn., New York City. *Circle 306 on Reader Service card*

**FLOOR TILE.** More than 100 floor tiles from four separate lines are displayed in an eight-page catalog in full color. Catalog also includes eight room interiors. Johns-Manville, New York City. *Circle 307 on Reader Service card*

**MODEL BATHROOMS.** How to sell a bath is the subject of an eight-page booklet prepared for homebuilders. Includes a section on manufacturer's color-coordination service. American Olean, Lansdale, Pa. *Circle 308 on Reader Service card*

**SECURITY SYSTEMS.** An eight-page brochure in color describes and illustrates several products for apartments, including intercom systems, mail boxes, door chimes, viewers, emergency alarm and security systems. Auth Electric, Long Island City, N.Y. *Circle 300 on Reader Service card*

**OUTDOOR METER REGISTERS.** Remote registers for water meters eliminate access problems and inconvenience for the homeowner. Typical applications are illustrated in a four-color brochure that details equipment features and advantages. Six pages. Badger Meter Mfg., Milwaukee. *Circle 301 on Reader Service card*

**APARTMENT INTERCOM SYSTEMS.** Lobby push-button and directory panels, plus intercom components including single- and double-channel handsets that enable tenant to talk with person seeking admittance, are included in a four-page brochure. Perry-Briggs, Cleveland. *Circle 302 on Reader Service card*

**ARCHITECTURAL LIGHTING FIXTURES.** Twenty-four-page catalog presents a wide range of cast-aluminum fixtures, including three new lighting lines—outdoor mercury-vapor luminaires, weather-tight fluorescent fixtures and incandescent wall brackets. Also included: recessed and semi-recessed luminaires, post lights, wall brackets and landscape units. McPhilben Lighting, Melville, N.Y. *Circle 309 on Reader Service card*

**RANGE HOODS, VENTILATING FANS.** Island hoods with twin centrifugal blowers are the newest models in a 20-page catalog. With a full line of range hoods, as well as bathroom and kitchen ventilating fans. Miami-Carey, Cincinnati. *Circle 310 on Reader Service card*

**OUTDOOR LUMINAIRE.** Aluminum luminaire for patios, gardens, lawns, pools and driveways gets the spotlight in an information sheet with photos of suggested applications. Data includes dimensions, mounting arrangements and available accessories. Westinghouse, Pittsburgh. *Circle 311 on Reader Service card*

**FANS AND HEATERS.** Ventilating fans and bathroom heaters are displayed in a full-line catalog with a completely new line of 8" and 10" fans.

Wall and ceiling models promise more air, lower noise levels, rugged mounting bars. Catalog includes accessory units. Broan, Hartford, Wis. *Circle 312 on Reader Service card*

**CERAMIC TILE.** Full-color 32-page booklet presents a wide range of decorating ideas, color schemes and designs for the bath. Ceramic-tile treatments of small powder rooms, second baths and family bath are shown in full-color photographs—with alternate color schemes for tiles, accessories, fixtures, and wallcovering. U.S. Ceramic Tile, Canton, Ohio. *Circle 313 on Reader Service card*

### H&H editorial index

HOUSE & HOME's 1967 editorial index, an eight-page reference guide, is now available.

It includes a cross-reference listing of all subjects covered last year by H&H—115 in all, from acoustics to zoning—plus a combined, chronological table of contents of major articles.

If you'd like a copy of the index (there's no charge), write to: Reader Service Dept., HOUSE & HOME, 330 West 42 Street, New York, N.Y., 10036.

**VINYL MURALS.** Sixteen murals and one ceiling design—all on cloth-backed vinyl that can be wiped down and easily removed—are displayed in a 24-page brochure with information on colors, widths and total wall covered. James Seeman Studios, Garden City Park, N.Y. *Circle 314 on Reader Service card*

**PLYWOOD SIDINGS.** Full-color installation photos highlight a comprehensive 24-page guide that examines manufacturer's four siding lines, cites advantages of each. Discussed: features, technical data, application instructions, framing and nailing schedule. Detailed application and construction diagrams are included. With specs. U.S. Plywood, New York City. *Circle 316 on Reader Service card*

**WHITEPRINTER AND DEVELOPER.** Dry whiteprinter that can be wall-mounted or set on a table makes prints up to 42" wide. It handles sepias—without turning them over—black line and foils. A specification brochure includes instructions. Rotolite, Stirling, N.J. *Circle 317 on Reader Service card*

**PRESSURE-TREATED LUMBER PILING.** The advantages of using pressure-treated timber are cited in a 12-page illustrated booklet. J. H. Baxter & Co., San Mateo, Calif. *Circle 318 on Reader Service card*

**OIL-FIRED BOILER PACKAGE.** Photographs, special features and a list of equipment—burner, circulator, heater, thermostat and wiring, etc.—plus options are contained in a four-page brochure. Crane, Chicago. *Circle 320 on Reader Service card*


**SHOWER ENCLOSURES.** Line of high-style tub-shower enclosures is displayed in full color and described in an eight-page brochure with information on sizes and styles. Showerfold, Chicago. *Circle 322 on Reader Service card*

# WOOD MOSAIC'S VINYLWOOD VINYL PROTECTED HARDWOOD

Add that extra sales appeal with a hardwood floor in family rooms, kitchens or baths.

A heavy vinyl sheeting protects the fine veneer permanently. It installs just like vinyl flooring over concrete, plywood, or wood, on grade or above grade.

Choose from walnut, cherry, or oak, in random planks or 3 classic patterns. All this at a price comparable to good resilient flooring. Write for complete literature. And look for us in the Yellow Pages.

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5000 Crittenden Drive  
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## NEW LITERATURE

**DECORATIVE PANELING.** Full-line of plastic-finished panels—including a new avocado florentine pattern—is illustrated in full color in a four-page brochure. The hardboard panels are suggested for kitchens, bathrooms, shower stalls and utility areas. Abitibi, Birmingham, Mich. Circle 353 on Reader Service card

**CENTRAL-SYSTEM HUMIDIFIERS.** Standard for rating capacity and performance provides that unit may be mounted on or in a return air duct, return air plenum, heating or cooling unit, supply air duct or supply air plenum. Included are testing requirements and specs. For a copy send \$3.50 to: Air-Conditioning and Refrigeration Institute, 1815 North Fort Myer Drive, Arlington, Va. 22209.

**STAINLESS-STEEL ROOFING.** Twenty-eight-page manual cites the advantages of stainless steel as a roofing material and suggests types and finishes, plus minimum gages for typical applications. Also detailed are suggested practices for flashing, copings, fascias, gravel stops, and drainage. Detail drawings are included. Committee of Stainless Steel Producers, American Iron and Steel Institute. Circle 355 on Reader Service card

**TRACTOR ATTACHMENTS.** Twenty-page catalog lists 77 attachments that can increase the versatility of D4 through D6 tractors. Included: bulldozer designs, parallelogram rippers, and scrapers. Also: several types of guards that help extend tractor life. For a copy, contact a local Caterpillar dealer.

**HEAVY EQUIPMENT.** Full-line catalog of equipment, including industrial tractors, tractor-loader combinations and backhoes, contains power and capacity specifications, dimensions, and structural and hydraulic data, as well as information on accessories. 68 pages. Ford Tractor Division, Birmingham, Mich. Circle 350 on Reader Service card

**INDUSTRIAL EQUIPMENT.** Buyers guide contains illustrations and specifications on manufacturer's full line of industrial tractors on wheels and tracks. Included: integral loader tractors, four-wheel-drive loaders and backhoe loaders, fork lifts, and scrapers. Guide also contains information on equipment financing and a list of district sales offices. International Harvester, Chicago. Circle 351 on Reader Service card

**FLOORS: SELECTION AND MAINTENANCE.** Practical information for builders and architects involved in the selection of flooring for residential and commercial construction is the subject of a 326-page manual. Covered: the major categories of floors and floor coverings—resilient, carpet, masonry, wood and formed-in-place. Twenty tables and more than 100 illustrations help the reader. For a copy send \$12.50 to: Publishing Dept., American Library Assn., 50 East Huron St., Chicago, Ill. 60611.

**MASONRY CLEANING.** Guide offers recommendations for cleaning white, grey, buff or chocolate-colored brick, nonmetallic glazed tile, natural stone, red brick and concrete block. It also cites proper procedures for applying, testing and rinsing masonry walls. Process Solvent Co., Kansas City, Kan. Circle 352 on Reader Service card

**TRUCK RENTAL.** Guide contains hourly, daily, weekly and monthly rates for trucks, trailers and truck equipment—sections cover pickups, panels, flat beds, tilt trailers, dollies and special equipment. For a copy send \$10 to: Industrial Research Div., Midwest Publishing Co., 740 North St., Chicago, Ill. 60611.



### "What apartment dwellers say about PRIVACY"

Every builder of apartments and every apartment owner should have this new report.

So should you, even if you are only thinking about building or financing an apartment building.

We hired an independent research firm to find out what apartment residents really think about privacy—about clatter from the room next door—about irritating noises from the apartment above or below.

We found out plenty.

There are many, many poorly constructed apartments, even those advertised as "luxury" and those with high rents.

One man wrote, "This apartment is supposed to be soundproofed. This is a bunch of bologna. I'm planning on moving."

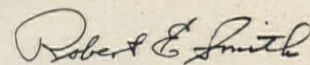
Another said, "Our main complaint is the apartment above. It sometimes sounds like they are running a Judo school."

Another: "Your noise survey seems to hit the one complaint we have. If it were not for this, we would be most satisfied."

We would like to send you a summary of this survey. Your eyes will be opened when you read the rest of this report. It clearly demonstrates that a new type of apartment dweller is coming into the market; a more sophisticated person who will no longer accept noisy apartment buildings.

It is now becoming clear that apartments of the future will have to provide a high degree of soundproofing and genuine privacy for the tenant.

For your copy of this report, just write for "What Apartment Dwellers Say About Privacy," The Flexicore Co., Inc., P. O. Box 825, Dayton, Ohio 45401.



Robert E. Smith  
Vice President and Manager



# Thermopane is for people who have better things to do than mess around with storm windows.

With Thermopane® insulating glass in your windows, there's nothing to put up. Or take down. Or mess around with. You even cut your window washing in half (Thermopane has only two surfaces).

So tell your builder you want Thermopane in all of the windows of your new house. Choose any style of window you want — double hung, casement, awning or sliding.

He can get them with Thermopane in them.

All you have to do then is relax.

If you'd like a copy of our colorful Thermopane booklet of architectural styles and window treatments, send 10¢ to:

**LOF** Libbey-Owens-Ford Glass Company

GLASS Toledo, Ohio 43624

**WARNING: There are many imitations of Thermopane insulating glass. For your own protection insist on the real thing. Only Libbey-Owens-Ford makes Thermopane.**



**naht** The Name of the Game is Living.





*This advertisement  
appears in Life Magazine.*

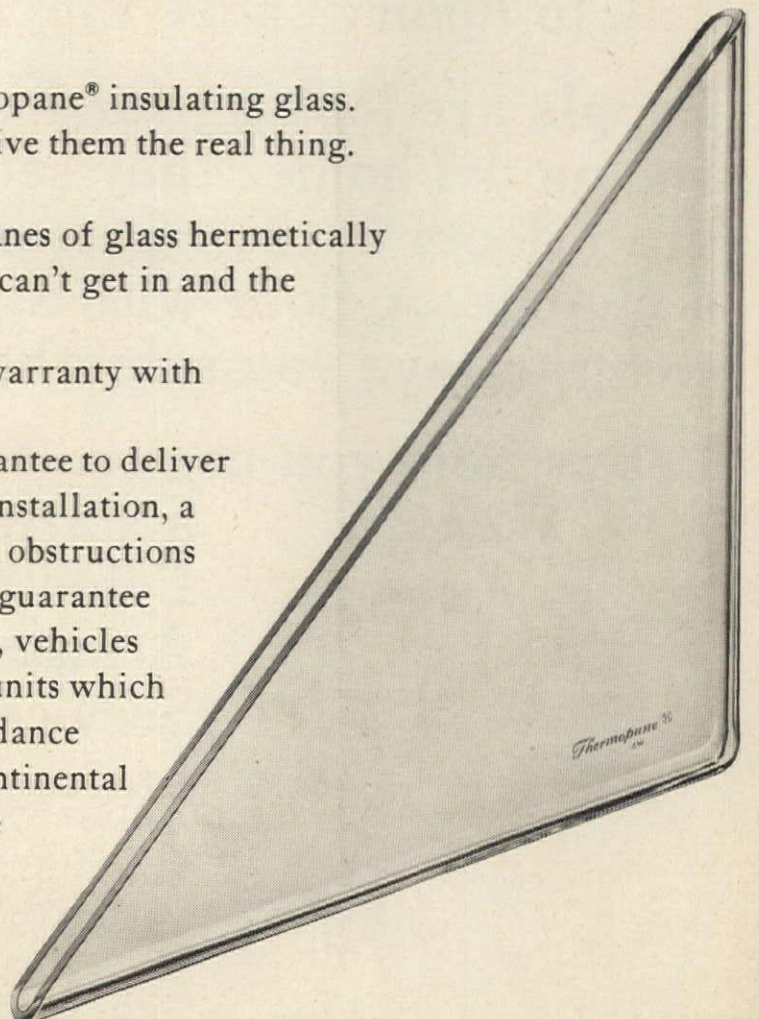
*Home buyers are getting the message.  
Shouldn't you?*

We're not only telling home buyers about Thermopane® insulating glass. We're telling them to beware of imitations. So give them the real thing. Why mess around?

Thermopane with the GlasSeal® edge is two panes of glass hermetically sealed at the edges . . . a glass-to-glass seal. Dirt can't get in and the dry, clean, insulating air won't leak out.

Thermopane is so reliable, we offer a 20-year warranty with each unit that reads like this:

"For 20 years from date of manufacture, we guarantee to deliver without charge, to the shipping point nearest the installation, a replacement for any unit which develops material obstructions of vision between the interior glass surfaces. This guarantee does not apply to Thermopane units used in ships, vehicles or commercial refrigeration; to broken units; to units which have not been handled, installed or used in accordance with our instructions; to units used outside the continental United States; or to replacement units beyond the period covering the original unit. We make no other guarantee or warranty, express or implied, respecting this unit."



**Libbey-Owens-Ford Glass Company, Toledo, Ohio 43624.**

## Color it sold.

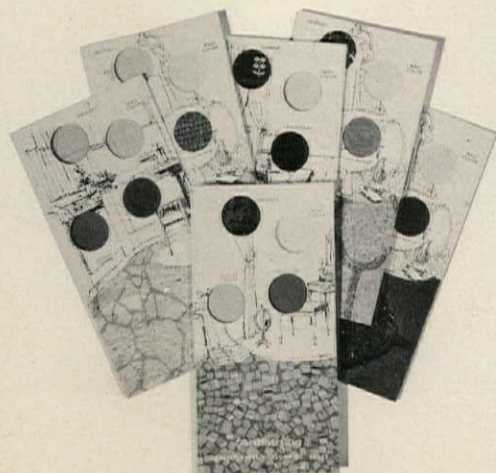
It doesn't cost extra money to color your kitchen floors exciting.

You can have lively green for the price of lifeless gray. Blue doesn't cost one red cent more than beige. "In" yellow costs the same as off-white.

Bold, head-turning color like this is standard through the entire Armstrong line for '68. From budget-priced vinyl-asbestos Excelon<sup>®</sup> Tile to luxury sheet Vinyl Corlon<sup>®</sup>.

People are looking for fresh, dramatic touches in the model homes they see. They're tired of the drab floors in their present place and are eager for a change. A floor with a little flair is just the thing to give you a foothold.

Let us help you use the selling power of color. As a starter, send for our Builder's Color Scheme Kit. Write Armstrong Builder Design Service, 506 Sixth St., Lancaster, Pa. 17604.



**Armstrong**

This is Armstrong Excelon Tile in a new pattern called Rocosa<sup>™</sup>. Also available in shimmering blue and toasty brown.