

1952

# Vine Street Elementary School, Bangor, Maine 1952

Eaton W. Tarbell & Associates

Follow this and additional works at: [https://digicom.bpl.lib.me.us/books\\_pubs](https://digicom.bpl.lib.me.us/books_pubs)

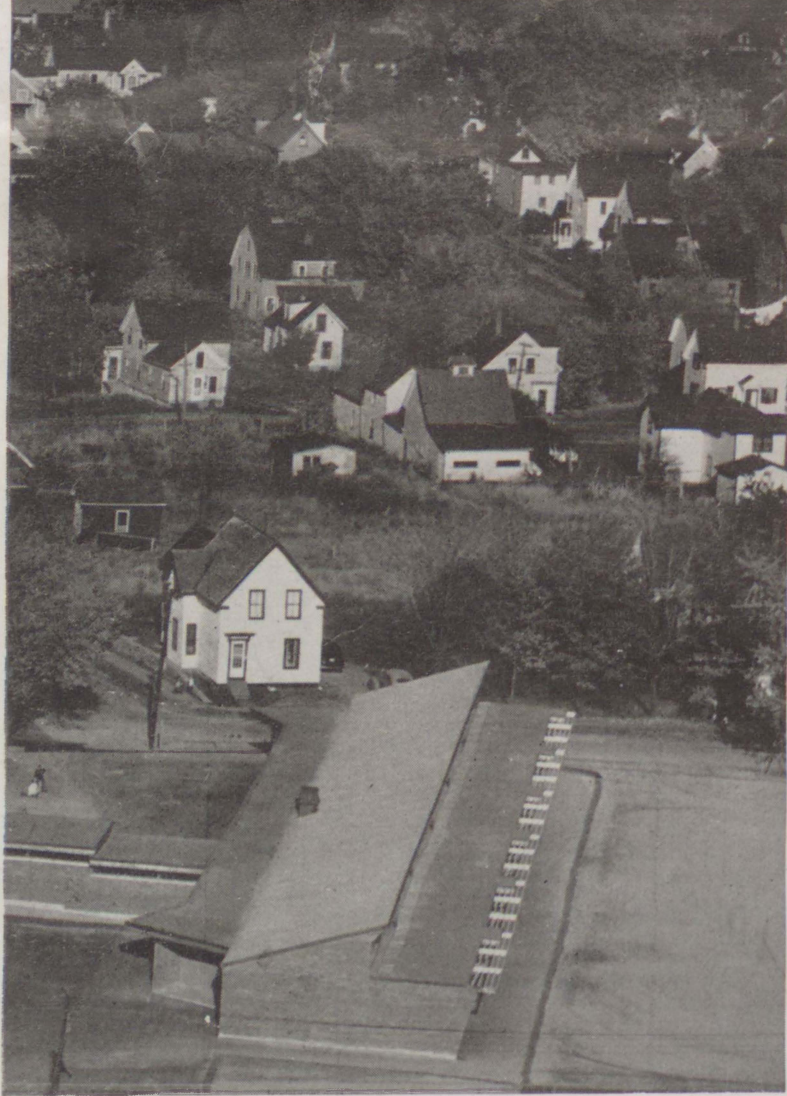
---

## Recommended Citation

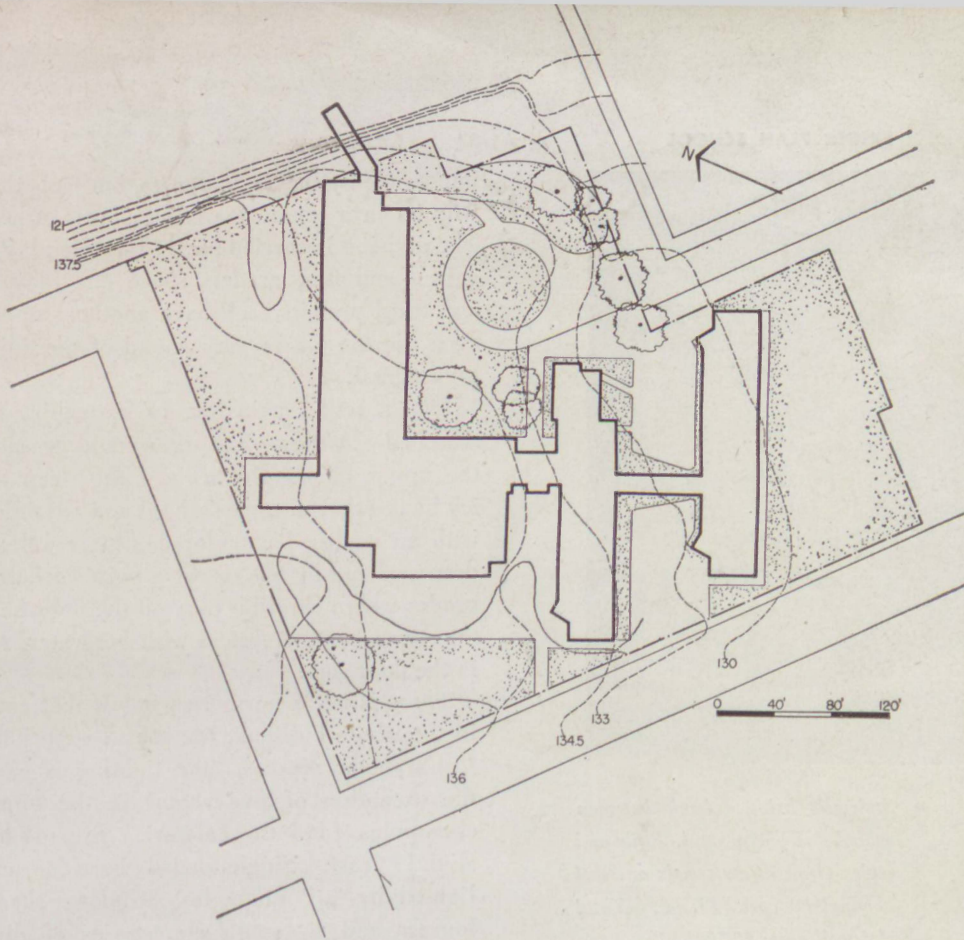
Eaton W. Tarbell & Associates, "Vine Street Elementary School, Bangor, Maine 1952" (1952). *Books and Publications*. 336.  
[https://digicom.bpl.lib.me.us/books\\_pubs/336](https://digicom.bpl.lib.me.us/books_pubs/336)

This Book is brought to you for free and open access by the Special Collections at Bangor Community: Digital Commons@bpl. It has been accepted for inclusion in Books and Publications by an authorized administrator of Bangor Community: Digital Commons@bpl. For more information, please contact [ccoombs@bpl.lib.me.us](mailto:ccoombs@bpl.lib.me.us).





Photos: Ruth Gray



Prize-winning school in Maine weatherproofs the . . .

## FINGER PLAN FOR THE SNOW BELT

VINE ST. ELEMENTARY SCHOOL, Bangor, Me.  
EATON W. TARBELL & ASSOCIATES, Architects  
VERRIER CONSTRUCTION CO., Contractor  
WILLIAM K. WILSON, Consultant to School Committee

The finger-plan idea, tailored for the California climate, was just too good to leave in California. It has steadily been moving north and east. With this school\* it has made the full trip—all the way to Maine.

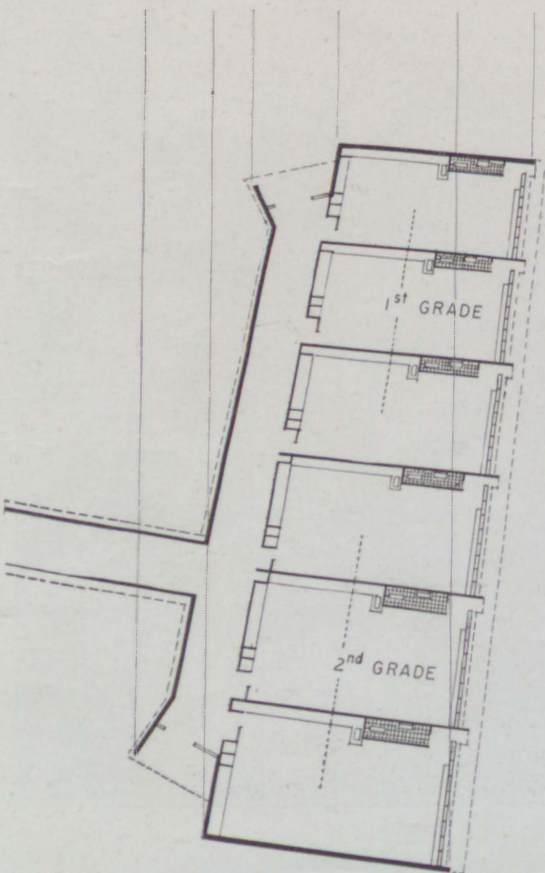
Architect Tarbell, reanalyzing the idea for one of the most rigorous climates in the US, has made the finger plan practical for temperatures that hit  $-30^{\circ}$  and hover long around the  $0^{\circ}$  mark. His adaptations: 1) shorter fingers; 2) orientation for maximum solar heating; 3) heavily insulated northern exposures; 4) roofs designed to utilize the insulation value of snow; 5) courts sheltered against winter winds and snowdrifts.

Result: heating costs for Sept. '51-June '52 were \$2,393.70 compared with \$3,700.17 during the same period for a conventional Bangor elementary school with the same number of classrooms and comparable assembly area (37,500 gal. of oil for the new school, 57,900 for the conventional school). Cost of construction was an economical \$11.32 per sq. ft., 75¢ per cu. ft. at 1950 prices.

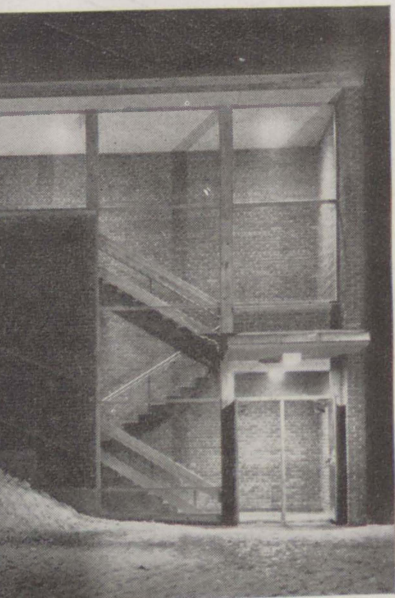
This school is the first of several to be built in a long-range expansion and overhaul of Bangor's entire educational plant. It's three classrooms per grade and capacity of 600 students bring it to the maximum enrollment envisioned in the Bangor program; no new fingers will be added.

Main entrance, administration and special-activities areas divide the building into a lower school of single-loaded corridors reached by a corridor-ramp, and an upper school with double-loaded corridor. The architect would have preferred all single-loaded corridors, a scheme made

\* One of the five top award winners in *School Executive* magazine's competition (AF, Apr. '52).





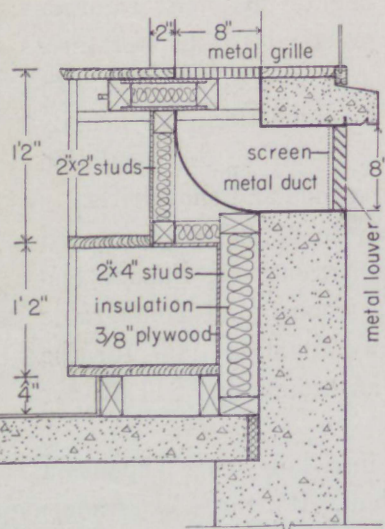
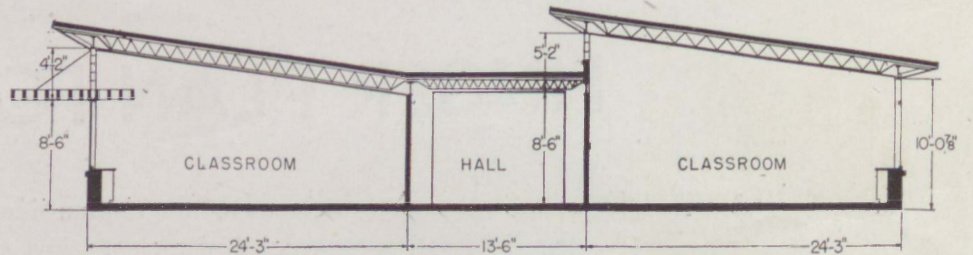
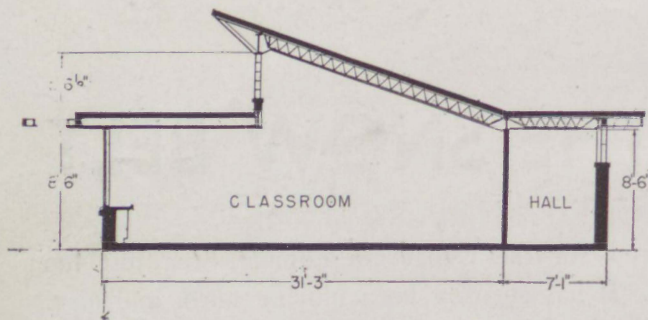
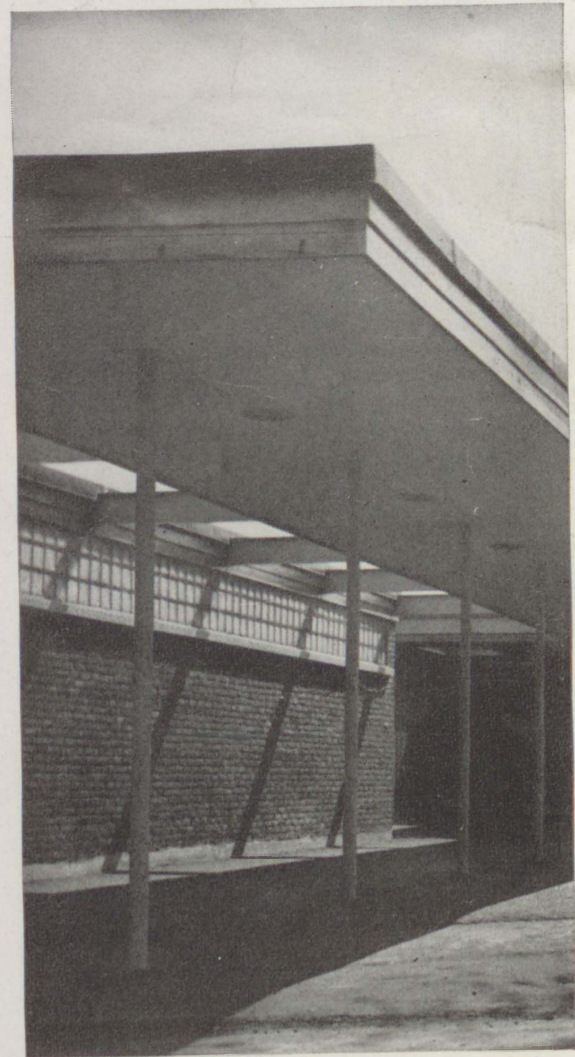


Stairwell bridges bank between school and playground. Rails and stairs (iron safety treads on steel channels) cost \$1,500. Total stairwell cost: \$8,750.

impossible by the  $3\frac{1}{2}$ -acre site, but feels that the solution with its clear separation of age levels turned out happily. The division is carried neatly into the play areas: kindergarten and first graders share one play court; second and third graders each have another; upper-school children use the 6-acre playground of the adjoining junior-high school.

Like a settler chinking up his cabin, Tarbell warily searched out the points where cold or snow might gain the upper hand. He bridged the steep and sometimes icy bank between upper school and adjoining playground with an enclosed corridor and stair well; he gave children arriving by bus or car a porte-cochere; in the lower grades where children play on the floor he supplemented the steam heating system with hot-water, radiant heating in the floor slab.

There is not a northern window that could be avoided in the whole building, but school superintendent Roland J. Carpenter reports, "the lighting is excellent." With the exception of five rooms in the upper school, all classrooms (and the cafeteria) are oriented south and slightly east. Single-loaded corridor classrooms are lighted by  $\frac{1}{4}$ " plate-glass windows shaded with fixed louvers and by south clerestories of directional glass block. Tarbell's decision to use this kind of cross section was determined from tests on models and on actual classrooms in five Maine schools he had previously built.



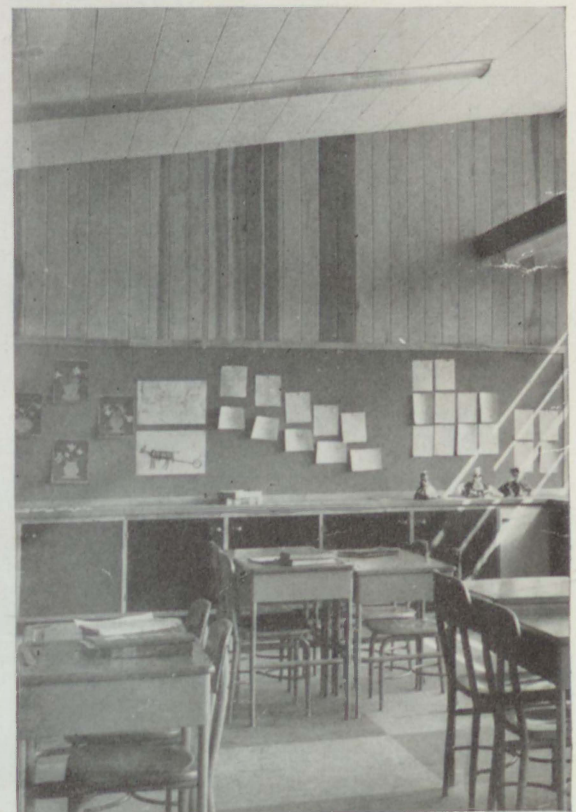
Ventilation panel, operating like a drawer beneath windowsill, controls intake of air through wall louvers. Device was used experimentally in two offices, has worked out well.

In the double-loaded corridor wing, south classroom windows are surmounted by glass block, with fixed louvers below the glass block carried through the wall into the classroom. Northern classrooms in the wing have double-glazed windows and south clerestories.

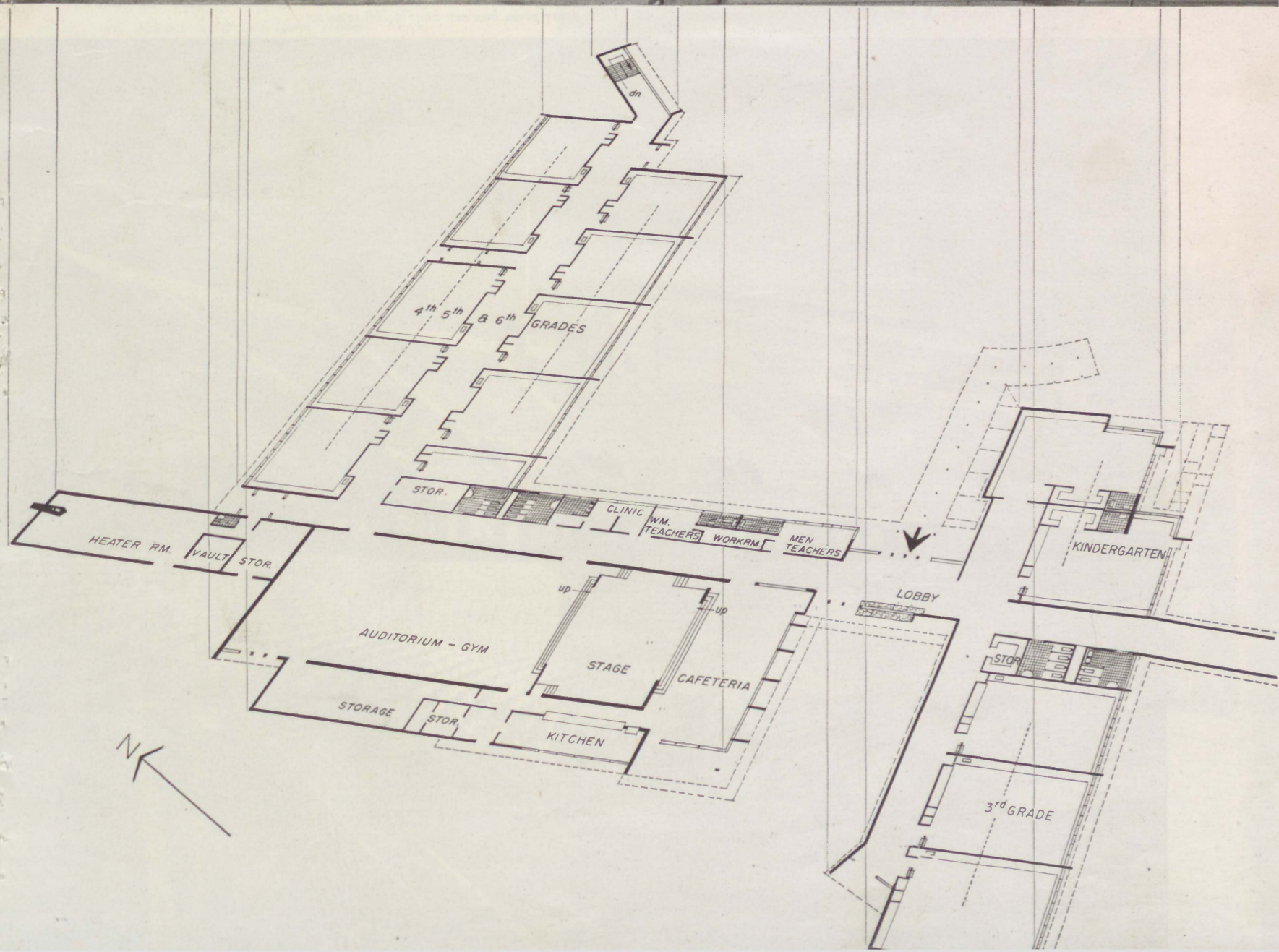
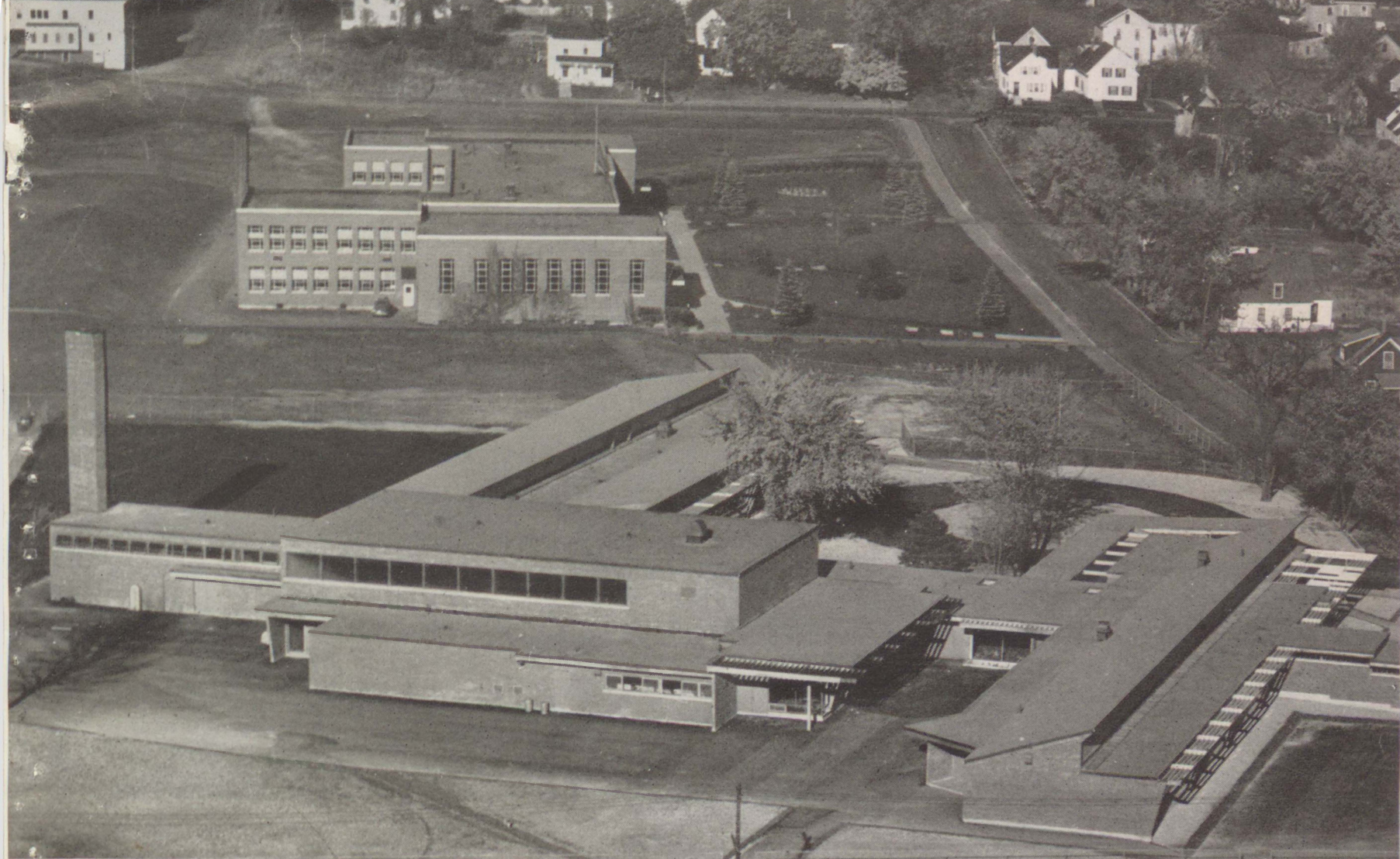
All classroom windows are fixed. Pneumatically controlled unit ventilators supply 18 cu. ft. of warmed air per minute per pupil. Return air is taken from the floor through the wardrobes by a duct and fan system. Administrative rooms have casement windows except for the clinic and women-teachers' lounge. There the architect experimented with his own design of a horizontal sliding ventilation panel which controls air coming into the room through the window sill (*see detail*). It has been so successful he plans to use it extensively in future buildings.

Along its northern faces, the building is armored against the full onslaught of the Maine winter. Corridors are lighted with one or two rows of glass block; walls are 8" brick with 2" insulation batts.

For some of the qualities that make this a good school for any region, *see the next page*.







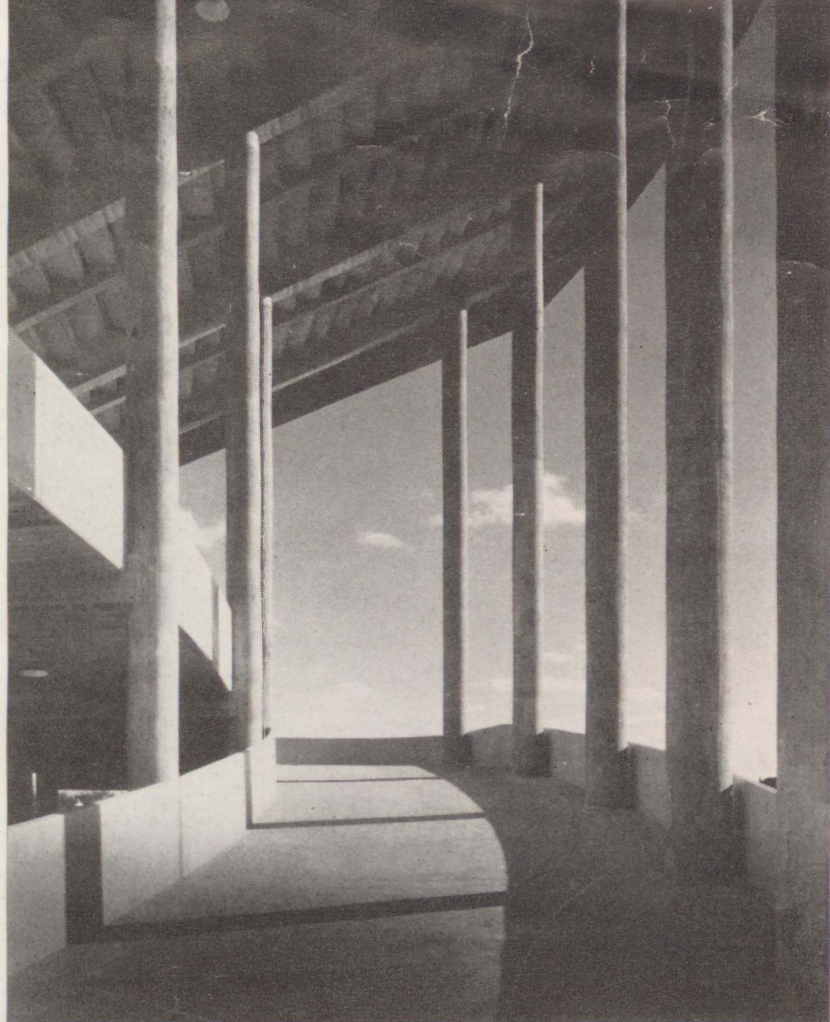


### Press box de luxe

A luxurious three-level, glass-enclosed press box caps the upper tier on the west side of the stadium. Space is provided for 300 television and radio broadcasting personnel plus equipment with additional space available for visiting dignitaries. Rest rooms, snack bars, a photographic dark room complete this space which even boasts an elevator to whisk newsmen to that highest level.

All spectators have a good view. Sight line clearance from each row to the far side of the playing field is 3" above the row in front. The 3" was chosen to give maximum visibility yet keep the stands from being too high. (Top row is 74' above normal grade.)

At present the stadium can hold 70,000 people. Future plans call for extending the upper tiers around the ends, raising capacity to 112,000.

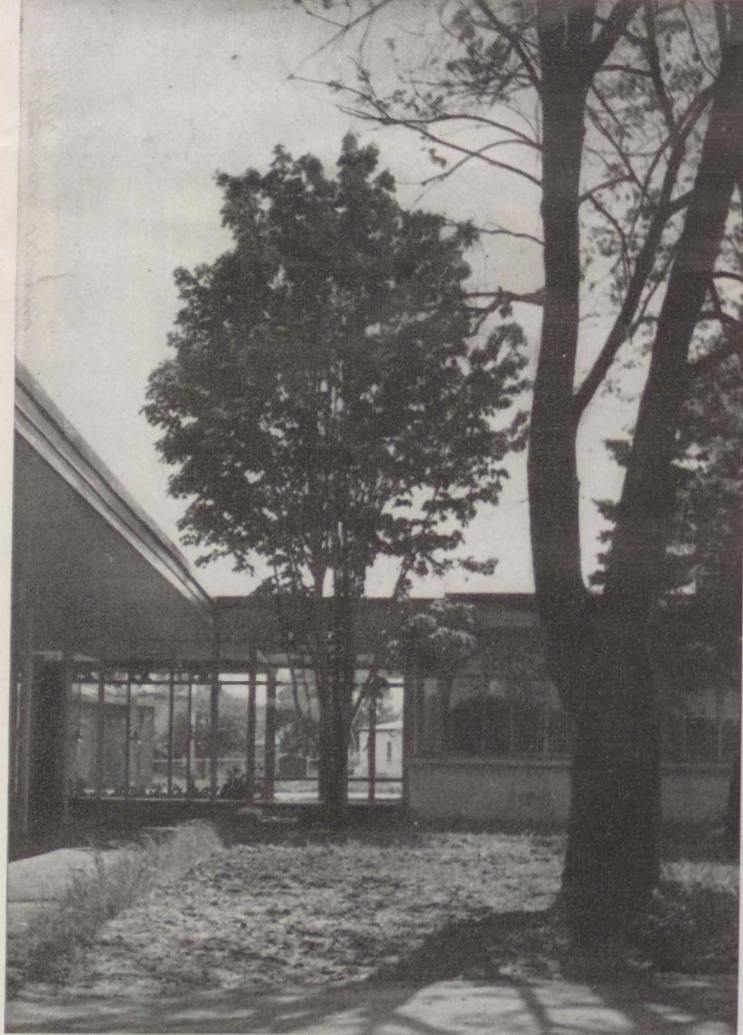


*Wide ramps lead to upper concourse and upper stand seats*

*Lower bowl below grade seats 40,000, each upper tier seats 15,000. Three-story press box can handle 300 reporters*





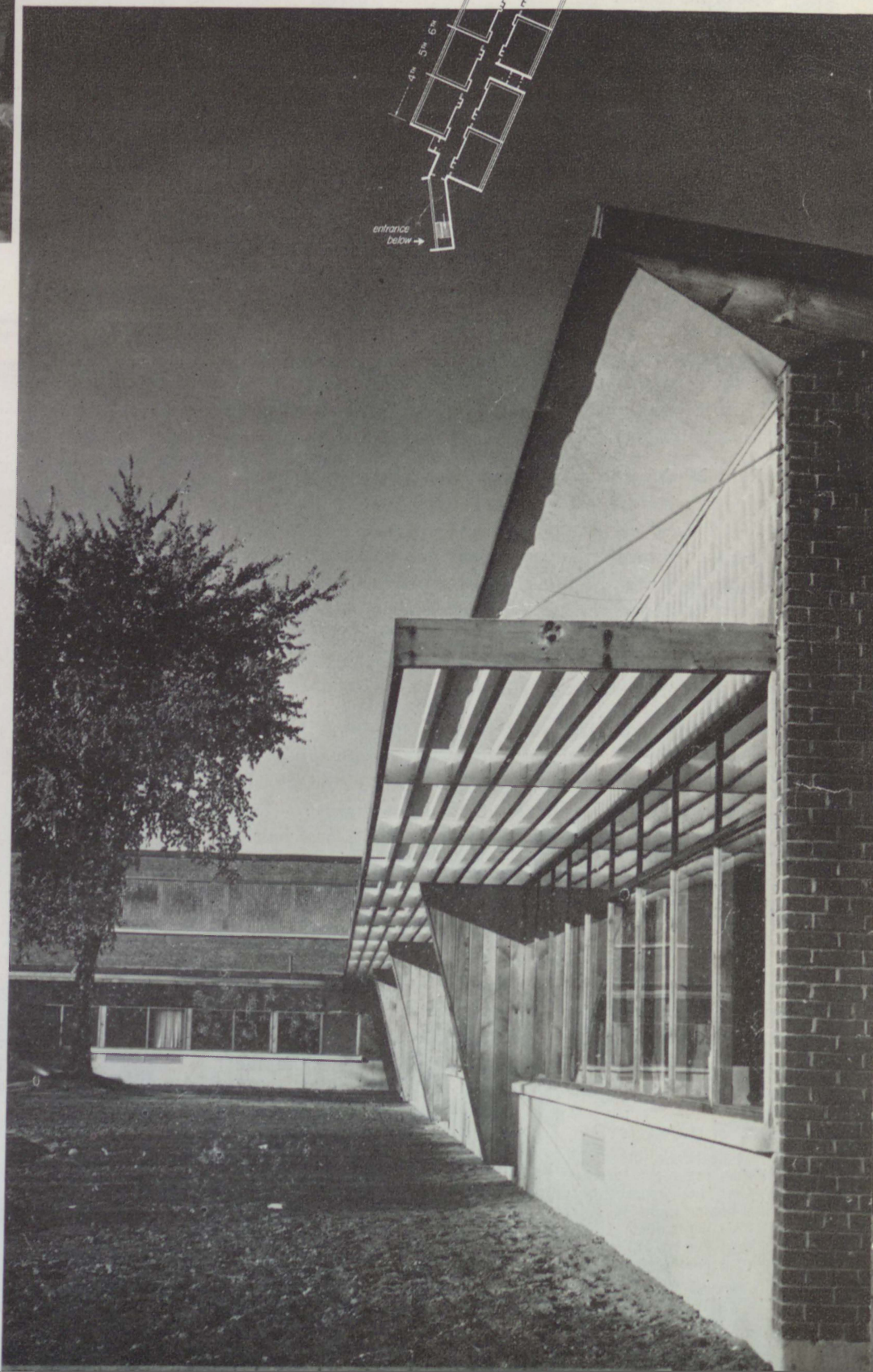
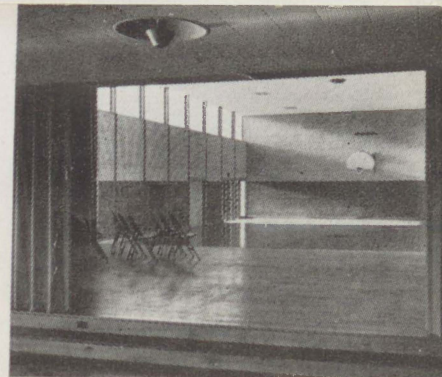
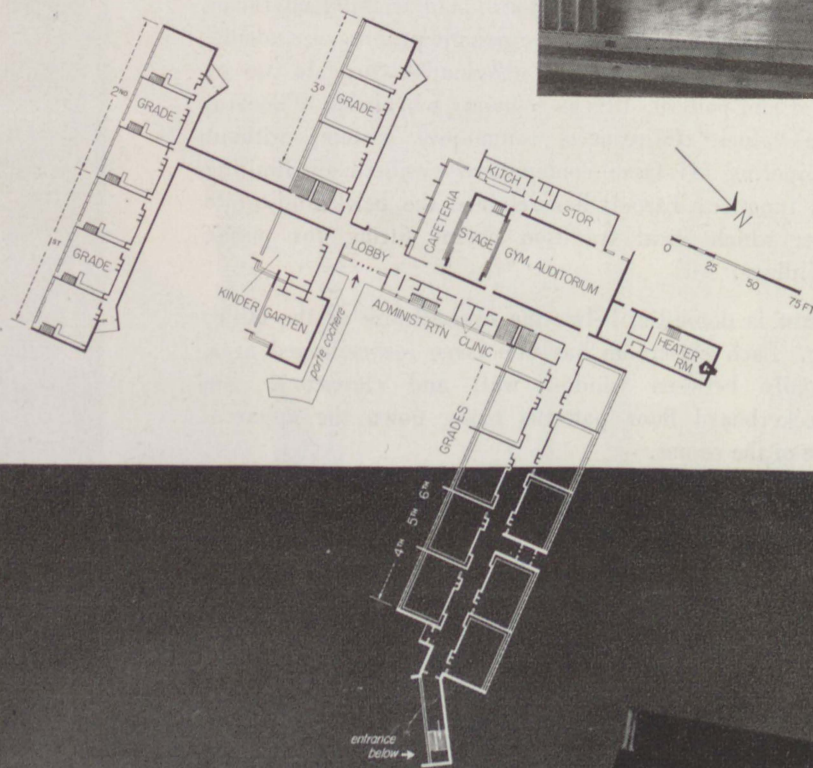


*Glazed lobby (backed by two-way planting box) and administrative area divide building into distinct upper and lower schools. Porte cochere joins entrance to bus-loading dock.*

*South face of upper-classroom wing. Interior louvers are junior beams with wood fascia. Exterior louvers are wood joined by junior beams. Fins separate classroom windows, cut noise.*



*Special-activities stage is versatile. Its sound-resisting folding walls open, front or rear, into large gymnasium or small cafeteria.*





This is a building with the kind of good manners that come from the heart. Its warm and friendly character stems from the architect's sympathetic probing of students' and teachers' needs, from imaginative, organic use of color and pattern. It is an economy school rich in decorative values. It respects community custom; without hampering his fresh contemporary esthetic or limiting his function, Tarbell has retained the brick and white trim which local tradition deems fitting for public buildings.

**Scale** is domestic, belies the over-all size of the building. Each classroom has one large low-ceilinged area, usually between window wall and clerestory. Big checkerboard floor patterns bring down the apparent size of the rooms.

**Color** was planned in the early design stages to accent use and scale by demarcating the elements of the rooms. Bright hues are applied in small areas like cabinet doors, room doors, small walls. They stand against backgrounds of white or natural wood. In the lower school color spots are limited to the primaries and secondaries; in the upper classrooms the more complex tertiaries are introduced, as red-orange, orange-yellow etc. Classrooms are identified by their door colors and each room repeats its special color on the wall behind the sink, the teacher's closet door, certain cabinets. "Children themselves create color," says Tarbell. "We used bright colors direct from the palette to complement the gayness of their clothes, the spontaneity of their games and voices. They become in shape and size a part of those elements which belong to the children and their activities."

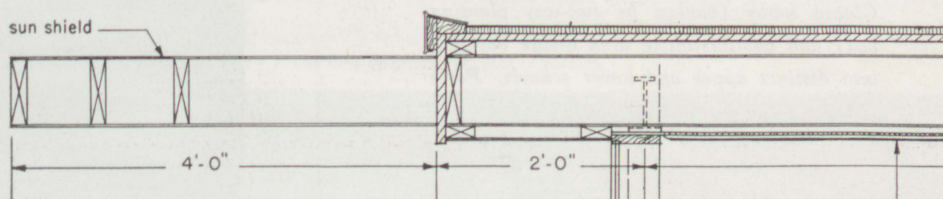
**Built-in classroom furniture** is ample and varied, includes a storage cubbyhole for each student, files for the teacher, cabinets for materials, shelves for books, displays, projects. Each room has its own sink (kindergarten and the first two grades also have separate classroom toilets). The two-way display case beside each classroom door permits the class and its public to enjoy three-dimensional exhibits, also provides an inconspicuous way of viewing the room from the corridor.

**Separate entrances** for each of the lower classes, related to gates in the site fence, accent the children's ownership feeling for their particular part of the school, break up the milling herds at arrival and departure. The kindergarten has the special intimacy of its own hand-somely louvered play-court corner.

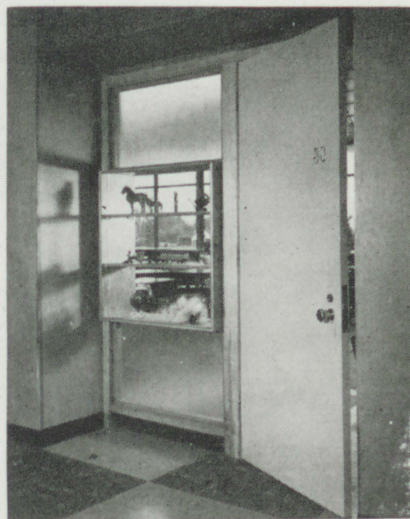
**The special activities area** is versatile. The stage of the combination auditorium-gymnasium has a sound-resisting folding wall both front and rear. The rear of the stage opens into the cafeteria so that by manipulation of curtains the stage can be used for small or large groups. Kitchen and serving counter are so placed that when need arises large groups can be served in the gymnasium.

#### Cost data:

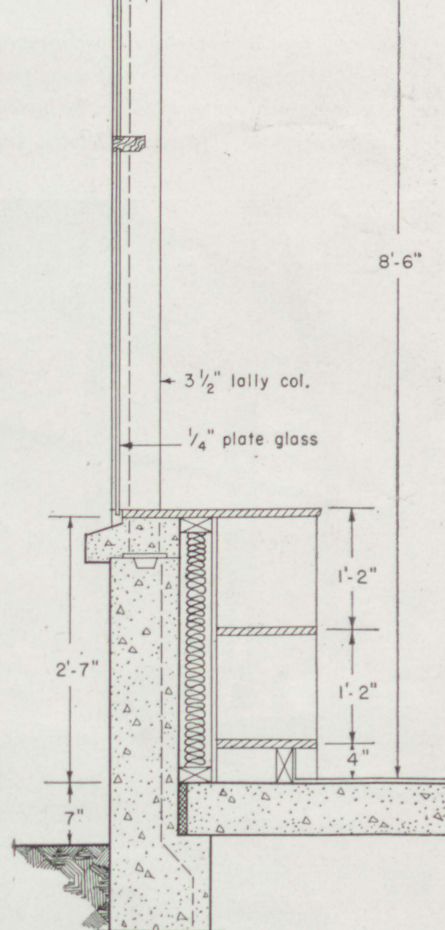
Total (excluding architect's fee of \$26,676) .....	\$444,599.00
Cost per room (gross) .....	21,980.00
Cost per room (excluding gymnasium, cafeteria, heater room) .....	16,466.00
Cost per student (excluding same) .....	576.00
Cost per sq. ft. (gross) .....	11.32
Cost per cu. ft. (gross) .....	.75



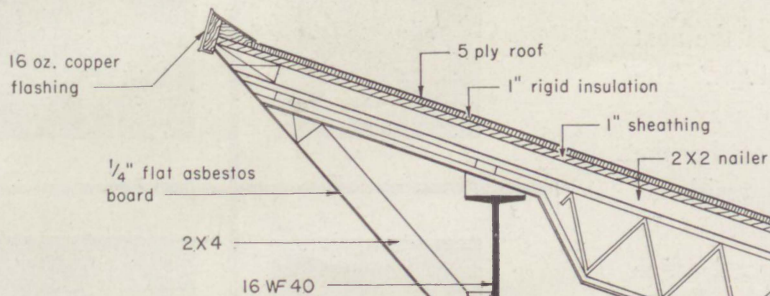
Display box is corridor-classroom window



Sink alcove is feature of each classroom





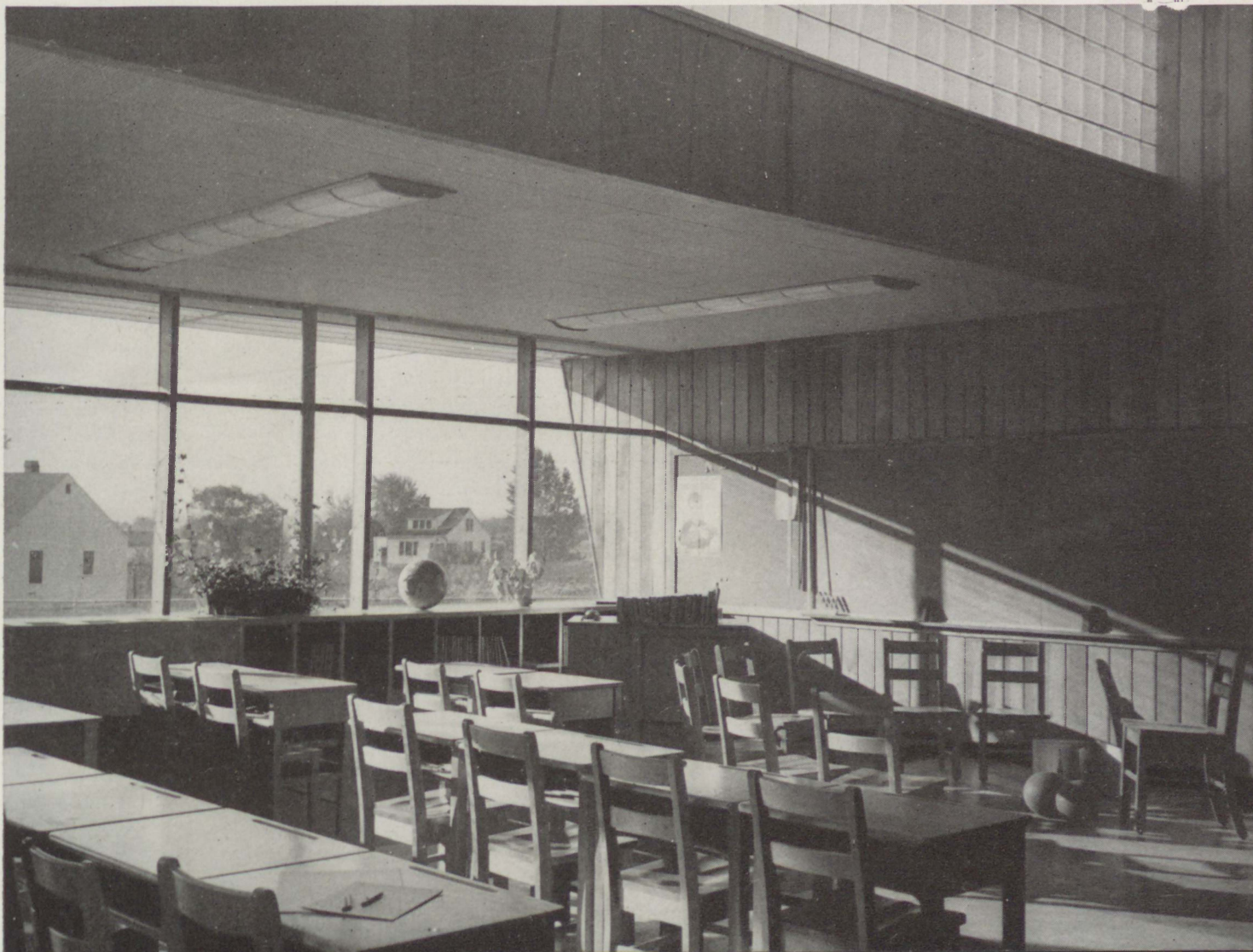
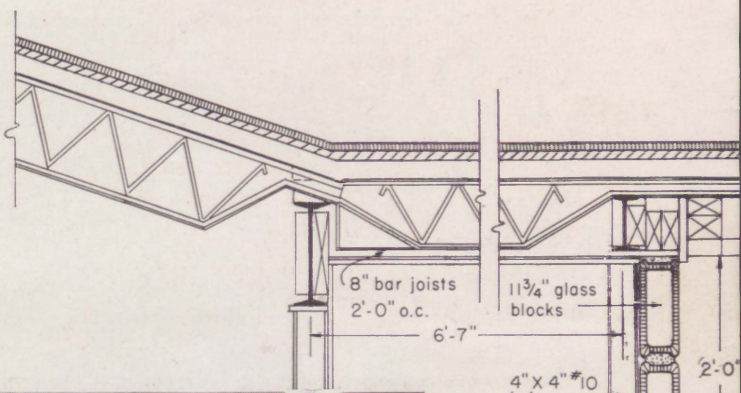


Kindergarten (left) has own louvered corner in court shared with first grade.

Clerestories and windows (below and section) both face south in single-loaded corridor classrooms. Low-ceilinged area brings down scale. Lights are fluorescent trof-fers with prismatic lenses. Front row is separately controlled to illuminate chalkboard.



Staggered kindergarten rooms have both east and south lighting





# THE NEXT PRESIDENT

Where he stands on public housing

Barring the stalking possibility of a dark horse, the face of the next president of the US appears somewhere in these two pages. The construction industry is bound to feel concern about the way this man looks at its own business—which also happens to be the nation's No. 1 industry. To bring into focus the next president's attitude toward the industry, FORUM has searched the records of the would-be candidates from both parties. Considering the great scope and numerous problems of the industry, the search was not particularly fruitful. Few of the candidates have expressed themselves on the general economics of the industry, or the future role of government, or the growing importance of military and defense construction, or the relaxation of controls. The only phase of building which seems to be politically timely is public housing.

## DEMOCRATS

Senator **Estes Kefauver**, whose supporters include Nathan Straus, long-time advocate of public housing and the first administrator of the USHA, believes that "it is not possible to meet the problem of housing for low-income groups without direct federal aid." Senator Kefauver told FORUM last month that the Housing Act of 1949 is "not wholly adequate, although it represents a long stride in the right direction."

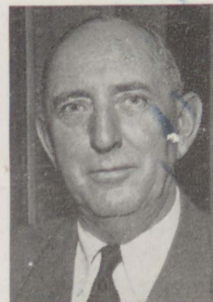
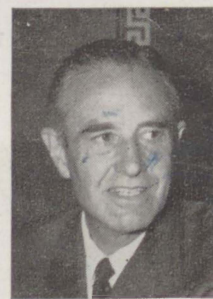
The "chief modification" which the Senator believes is required of the Act is a provision for "extension of additional aid for co-operative housing to meet the needs of middle-income groups." This aid, he says, "need not be in the form of direct subsidy but in the form of guidance, encouragement and technical assistance."

In general, Senator Kefauver believes that the construction of public housing should be left to the localities. He offers one possible "exception" to this rule, however: "The construction of family-type housing for military personnel." He says: "Certainly the housing provided today for military personnel cannot be regarded, in many communities, as satisfactory. I believe that the matter is one which requires attention by the federal government—and a determination to raise standards of such housing as promptly as possible. Obviously, substantial modification of the Wherry Act housing program is indicated by its failure to achieve its avowed purpose."

Illinois' Governor **Adlai Stevenson** is a "draft" possibility, not an active contender for the nomination; consequently, he has taken no campaign stand on any issue. Such stands must be found in his gubernatorial record.

In Aug. '51 Stevenson vetoed a bill passed by the state's general assembly which would have required a majority of voters of any Chicago ward to approve by referendum any proposed public housing project within that ward. Said Stevenson in his veto message: the bill "would enable an interested minority to organize the opposition of those who might be fearful of—or inconvenienced by—a proposed housing project, thereby blocking an improvement which would be beneficial to the entire community."

Stevenson called the Housing Act of 1949 a "great opportunity to correct many of the worst conditions throughout the country . . ." Noting objections from builders to the act, he said: "You don't have to approve the principle of public housing or the idea of government subsidies for some at the expense of everyone to recognize that without public housing it is generally conceded that only a limited and unsatisfactory answer to the slum problem can be expected." However, he admitted, "the new federal Act, or any government subsidy, can never be the whole answer—the housing deficiency can only be met in the final analysis by full-scale private building."



**W. Averell Harriman**, who many believe is the man with the presidential nod, told a convention of public housers last month: "The attempts . . . to virtually eliminate the provision of low-rent public housing for low-income families now living in slums must be vigorously opposed." Harriman also sounded what he called the "great new challenge in the field of housing" for the years ahead: ". . . We shall need to consider how we can best meet the needs of the people of moderate means—the people who have no need for public housing, but cannot pay the high cost of so much of the private housing being built today. We must find ways and means of bringing the prices of good housing down to levels they can afford. That . . . is a challenge that will call for the best efforts of the whole industry—with the full co-operation of government."

Senator **Richard B. Russell**, the Southern Democrats' choice, is a deviationist from administration policies on civil rights, but has been a "regular" Democrat on many other matters—including public housing. Alabama Senator John J. Sparkman, who did much of the rear-guard committee fighting to get a public housing bill passed, backs Russell, noting that the Georgia Senator's "progressive" record includes support of public housing. Russell, however, bases part of his campaign on the need for "strict economy" in government, and has stated that "nonessential" federal spending must be curtailed in deference to the nation's heavy military and foreign aid commitments. He has not indicated whether he considers public housing to be one of the "nonessentials" to get the axe.