

# Glass Houses May Become Reality

Engineering

## Walls Thin As Cardboard Now Possible

THE coming of the steel and glass skyscraper of the future, its height limited by economic considerations rather than by structural difficulties, is being hastened by the use of sheet metal largely to replace brick and stone in the new Empire State Building now being erected in New York.

A silvery chrome-nickel-steel alloy in angular sections one-twentieth of an inch thick will form a large part of the walls of the building. The metal was first developed for gun linings and is unrusting, non-tarnishing and unaffected by weather.

Such thin walls are likely to be used for buildings of the future. Some architects feel stone and brick walls for skyscrapers are not in keeping with steel structurally and are merely a heritage. The metal is said to save floor space, cost less and weigh less, give more light and result in better health for the occupants. Glass would be used to such an extent that partitions and great portions of outside walls would be made of it.

This tallest skyscraper in the world, being erected on the site of the old Waldorf-Astoria hotel at 34th St. and Fifth Ave., will be the nearest approach to the structural limit of 2,000 feet as determined by computations of the American Institute of Steel Construction. Its 85 floors will rise 1,043 feet high, and the building itself will be surmounted by a 200-foot observation platform or mooring mast for airships.

It is taller than the Eiffel tower

which rises 1,000 feet. The City Bank and Farmers Trust Co., will be 925 feet, and the Bank of Manhattan 838 feet tall. The Chrysler building soars 808 feet and the Woolworth building 792 feet.

The enormous weight of elevator cables, the inability of the human ear to withstand rapid pressure changes in an elevator going faster than 1,500 feet per minute, and the large floor area needed for elevator shafts make it impracticable to exceed the approximate 2,000 foot structural height limit.

The economic height depends upon the cost of land, the Steel Institute says. Its studies show that where land value is \$200 per square foot, a 63-story building brings greatest returns. When the value is \$400 per square foot, a 75-story building is considered most economical.

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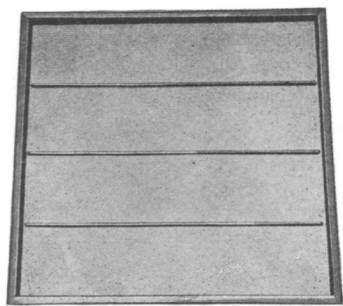
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## National Color Society

TO provide a forum for those utilizing color in industry, art and science, the National Color Society is being organized.

When the U. S. Pharmacopoeia Convention met here recently one of the problems that confronted it was the accurate use of color names. There were assembled experts interested in the application of color to pharmaceuticals, chemicals, paints, dyes, textiles, inks, ceramics and many other products of industry as well as in art. Out of this meeting there arose preliminary plans for the National Color Society.

One of the principal objects of the new society will be to encourage the general use of one or, if necessary, several basically sound systems for precisely designating specific color wherever exact specification of color is required. The new society expects to cooperate with other national organizations interested in the standardization of color and it is expected to advocate government participation in the setting of color standards.

A British Color Council was established last year, and an international color conference, as a preliminary to the adoption of an international color card, has been suggested to facilitate the world standardization of color.

*Physica*

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