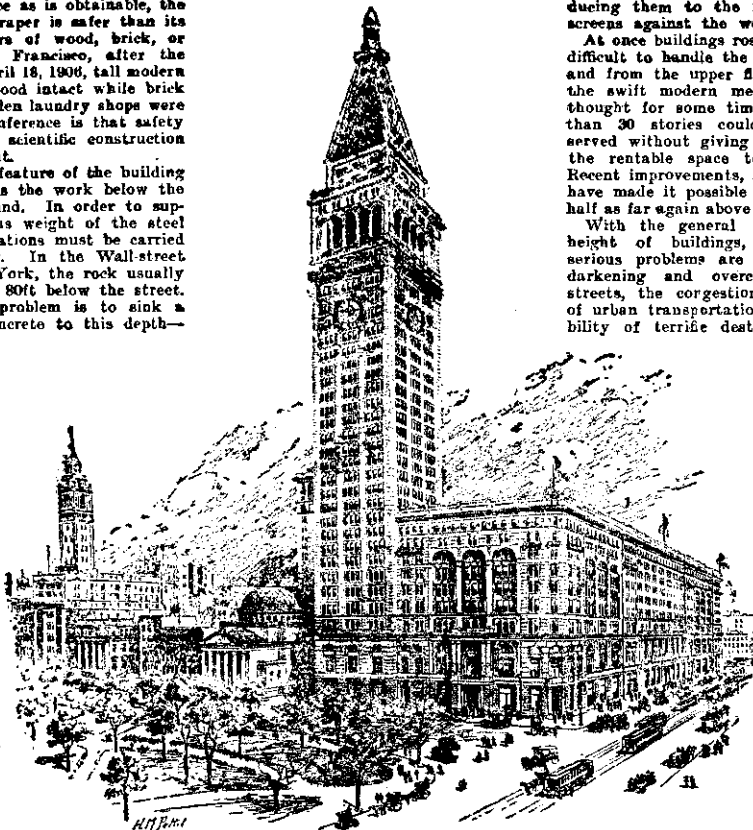


from such evidence as is obtainable, the steel-ribbed skyscraper is safer than its smaller neighbours of wood, brick, or stone. In San Francisco, after the earthquake of April 18, 1906, tall modern office buildings stood intact while brick cottages and wooden laundry shops were shattered. The inference is that safety is a question of scientific construction rather than height.

An interesting feature of the building of a skyscraper is the work below the level of the ground. In order to support the enormous weight of the steel frame, the foundations must be carried down to bedrock. In the Wall-street district of New York, the rock usually lies from 70ft to 80ft below the street. The mechanical problem is to sink a solid mass of concrete to this depth—



**THE TOWER OF THE METROPOLITAN LIFE-INSURANCE BUILDING, ON MADISON SQUARE, NEW YORK—**  
With the exception of the Eiffel Tower, this is the loftiest of terrestrial structures, being six hundred and fifty-eight feet high.

quickly, economically, and without endangering the surrounding buildings.

This is done by means of caissons. At first the caisson is simply a great box or frame—perhaps 30ft long by 8ft wide and 8ft high—which is laid on the ground, open at the top and the bottom. Labourers—known as “sand-hogs”—dig out the soil within the frame, and gradually sink it downward. When its top is level with the surface, another is fastened above it. As it descends farther and farther into the moist earth, it becomes necessary to roof the caisson and to pump in compressed air, in order to keep it from filling with water. Locks with double traps carry air to the work chamber and bring back the excavated soil, much as blood is pumped in and out of the human heart. At the greatest depth, the work involves much discomfort and some peril, though most of the accidents that occur are due to carelessness on the part of the “sand-hogs”—chiefly to their rashness in coming too quickly from the condensed air

of the caisson to the outer atmosphere. The result is the agonising and often fatal seizure commonly called “the bends.”

Similar shafts are sunk successively around the cellar walls and in the centre of the plot, so as to form a solid concrete base, resting on bed-rock, and supporting the feet of the steel frame. No stronger foundation could well be devised, and the method is one that involves little risk to neighbouring buildings.

In conclusion, it is pertinent to inquire what will be the end of this process of raising huge towers into the air? Before the invention of the steel frame, it was impracticable to go much higher than eight stories. For a taller building it would have been necessary to make the walls so thick that the rooms on the lower floors would have been mere niches in a mass of masonry. The coming of the steel frame effected an architectural revolution by taking the weight of the building off the walls, and re-

ducing them to the function of mere screens against the weather.

At once buildings rose until it became difficult to handle the traffic passing to and from the upper floors. Even with the swift modern mechanisms, it was thought for some time that not more than 30 stories could be adequately served without giving up too much of the rentable space to elevator-shafts. Recent improvements, as has been seen, have made it possible to go more than half as far again above the ground.

With the general increase in the height of buildings, however, other serious problems are looming up—the darkening and overcrowding of the streets, the congestion of all systems of urban transportation, and the possibility of terrific destruction by some

**A MOTHER PRAISES ZAM-BUK.**

**CUTS, BURNS, BRUISES, SCALDS, SORES, AND OTHER SKIN TROUBLES HEALED.**

Mrs. Eliza Jones, of Albert-street, Hartley District, Lithgow, N.S.W., has met with some interesting proofs of the remarkable all-round usefulness of Zam-Buk in the home. Zam-Buk heals cuts and sores, “cools” burns and scalds, soothes bruises, “smooths” and softens chafed hands, and its remarkable purity and unique antiseptic and germicidal powers amply justify the claim. “Every home needs a pot.”

Voicing her praises of the great value of this handy home healer, Mrs. Jones said to an interviewer:—“I cannot sufficiently express my gratification for the benefits my family have derived from the use of Zam-Buk. It is the ever-ready healer in my home for cuts, burns, bruises, scalds, sores, chapped hands, and other troubles, and I have found nothing to equal it. I have tried many other so-called healers from time to time, but found none to compare with Zam-Buk. No mother should be without a pot handy in the home for use on the children, as they are always hurting themselves one way and another, and Zam-Buk comes in very useful. I am a widow, and one of the oldest residents of Lithgow, so am consequently well known. I have recommended Zam-Buk to many of my friends, and its success has always been pronounced.”

Skin eruptions are very prevalent in the spring, but Zam-Buk will be found to cure them all—from the common pimple to the ugliest ulcerated sore. Zam-Buk is obtainable from all stores and chemists at 1/6, or 3/6 family size (containing nearly four times the 1/6), and a pot should be in every home.

**EVERY HOME NEEDS ZAM-BUK.**

**FOR TIRED PEOPLE**

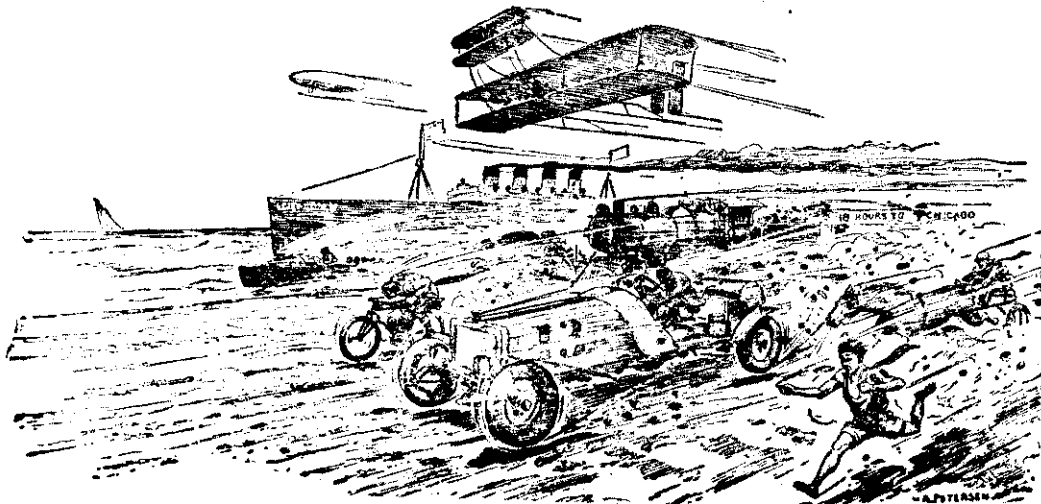
Who overstrain in one way and another there is nothing so healthful or so restful as a cup of good Tea, made right and served right. But it must be good. The high-water mark of excellence is reached by “Choysa” Brand Tea. It is delightfully refreshing and fragrant, and has a delicious flavour all its own. Let your grocer send you a pound and be convinced that there is nothing so good. Remember the name: “CHOYSA.” Price 1/8 per lb. — BOND AND BELL, Wholesale Agents.

great catastrophe. These help to make the question of a limit to the growth of the skyscraper a most momentous as well as a very difficult one.

“There is nothing in the engineering problem,” said a well-known writer in 1899, “to prevent the construction of a 50-storey building, but such a sight will probably never vex the eye of man.” Today, less than nine years later, structures of practically that height are being advertised for rental. Whether, in the coming years, these are in their turn to be overtaken by skyscrapers, of 60, 70, and even a hundred floors, it is safer not to prophesy. Only the future can show.

Friend: “What on earth are you doing to that painting of yours?”

Dealer: “Can’t you see? I’m rubbing a piece of raw meat over the rabbit in the foreground. Mrs. Ashdodie will be here to-day, and when she sees her pet dog smell of that rabbit, she’ll buy it!”



**THE QUICK AGE.**

“Are we degenerating into a race of speed maniacs?”

**ROWLAND'S KALYDOR FOR THE SKIN**

Produces soft, fair, delicate skin, heals all cutaneous eruptions, and insures a lovely delicate complexion to all who use it. — 2/6, 4/6, of Stores and Chemists.