

the lever from under a vertical bar, allowing a spring to draw this bar downward clear of a shoulder of the horizontal main bolt bar. A spring is connected to this bar and the door to draw the bar inward and simultaneously withdraw the bolts from the top and bottom and outer edge in the jamb of the safe, to unlock the door. The trip lever is automatically set as the bolts are thrown when the door is closed, to prevent the opening of the door until the desired time, when it opens of itself, without the use of any outside knob or device to disclose the position or arrangement of the bolt works.

How to Have Healthy Swine.

Keep large and small separate and not more than ten in a lot.

Feed regularly and liberally of wholesome food, always some bulky food, and let each feed be eaten up clean before more is given.

Give wallowing places, ashes, charcoal, and salt, and plenty of exercise in timber pastures yielding shade, roots, nuts, acorns, etc. But no doubly soured slops.

Provide ventilated shelters from wind, rain, and snow, but no litter. Hogs with litter get too warm. If you wish disease, put your hogs to the straw pile.

Maintain cleanliness in all things. Breed only mature animals, and never from a show herd. The offspring of immature or pampered animals is predisposed to disease.

Give pure water, from deep wells protected from surface water. Well water is not freezing cold in winter nor lukewarm in summer. Water from creeks (unless fed by springs), ponds, or pools is disease-breeding.

Pigs should be farrowed in early spring and kept only on growing foods—milk, bran slops, oats, green rye, grasses, clover, sweet corn—until late fall; then fatten rapidly, on corn mostly, but also green rye, blue grass, pumpkins, boiled potatoes and turnips, with bran, steamed clover hay, etc.—*American Agriculturist*.

HOMES FOR THE MANY.

The two houses represented in the accompanying illustrations are as different in character as could well be

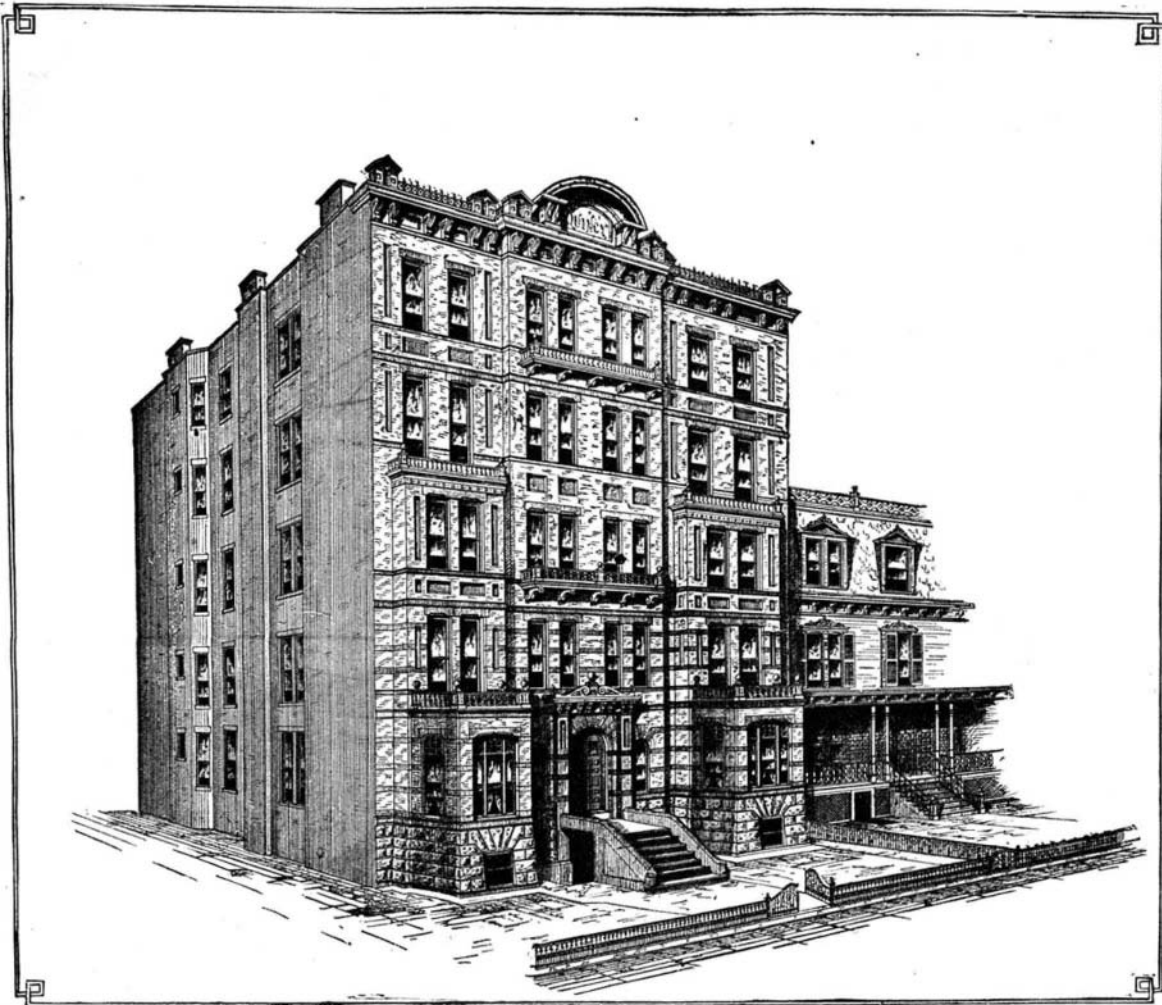
selected. The building in the upper cut is a good type of the better class of Brooklyn apartment houses. It is situated on Quincy Street, between Nostrand and Marcy Avenues, and was erected at a cost of about \$50,000. It has a frontage of 55 feet, and is 95 feet in

tainly deserves even if it cannot command success; and so it is that, if the storage battery motor people, now experimenting upon one of our surface railway lines, do not eventually show their system practically suited for such employment, it will not be for lack of industry, of brains, and of ingenuity. Two months ago only one car was making regular trips, its batteries needing recharging from the central station after each round trip of twelve miles—a process requiring some four or five hours. Now there are three cars running, the same needing recharging only at the end of the second round trip on the twenty-four miles, with only three hours consumed, at least so it is said, in the operation. Further than this, it is claimed that, in the not distant future, the apparatus bids fair to be that much perfected that only one charging will be required for the day's work of three round trips and thirty-six miles. As to the relative cost of this type of traction, we cannot speak with certainty; but as to its convenience, no one who has seen these cars will have a doubt.

Oil of Sassafras.

The manufacture of the oil of sassafras is becoming an important industry in some parts of the country, especially in the Southern States, where this tree is common. Only the roots are used; they are chopped

up into small pieces by a machine constructed for the purpose, the oil being then distilled from the chips by the aid of steam. About one gallon of the oil, weighing nine pounds, is obtained from 1,000 pounds of the chips. The uses for which the oil of sassafras can be employed are numerous and varied. It is a favorite perfume for soaps and candies; it is used as a solvent for different gums, and as a liniment. It is also very largely employed in the manufacture of several popular proprietary medicines. The importance of this industry may be expected to increase rather than diminish, as the sassafras and the persimmon are the two trees which are spreading most rapidly over the old and abandoned fields throughout the Southern States outside of the pine belt proper; and at present prices good wages can be made digging out the roots.—*Garden and Forest*.



NEW APARTMENT HOUSE, BROOKLYN, N. Y.

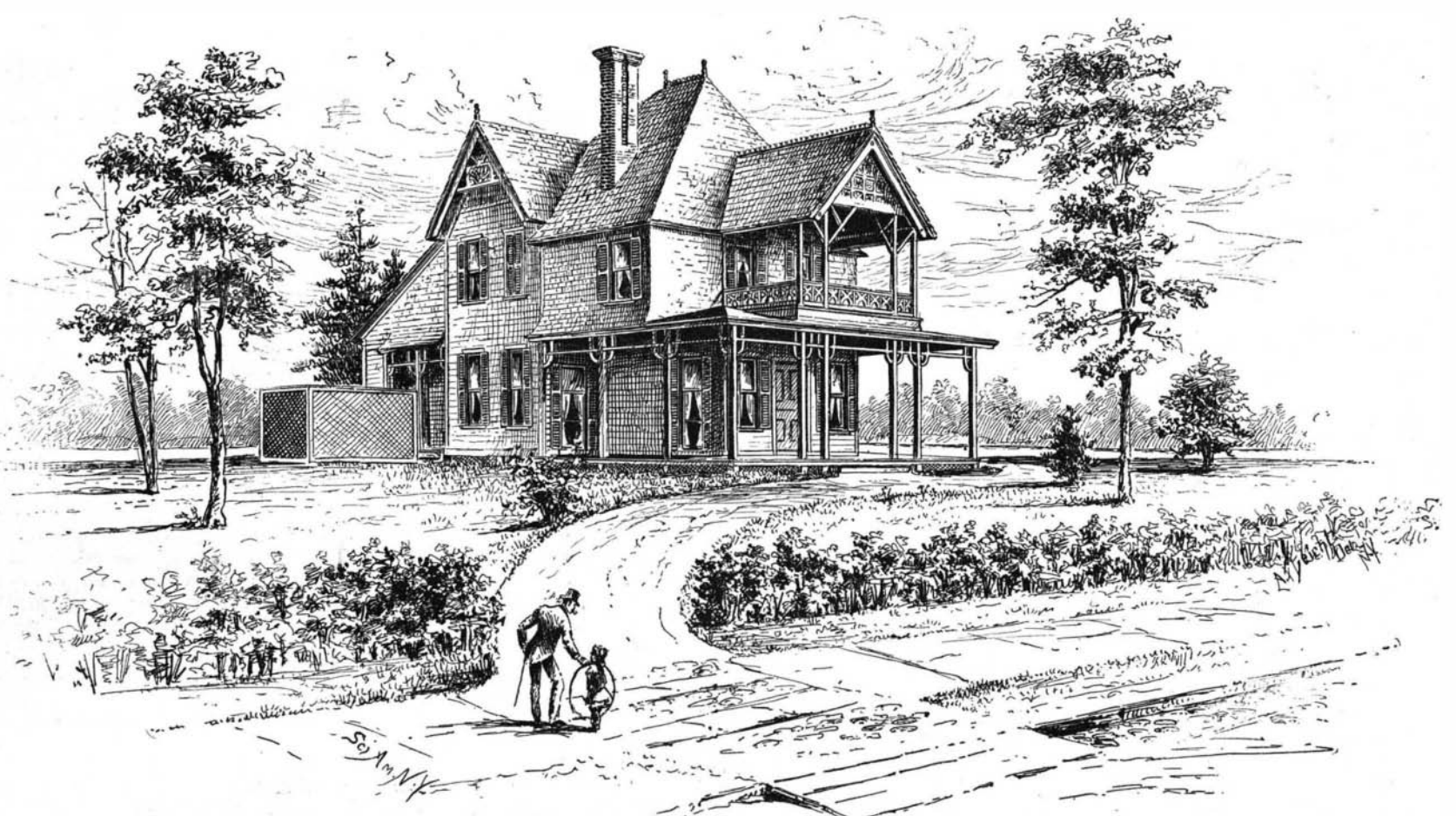
depth. It was erected from the plans of Amzi Hill, architect.

The country residence shown in the other cut was erected for Mr. Edwin A. Burgess, at Buttonwood, R. I., and is a good representative of an inexpensive seaside or summer residence. With a well planned interior, an extension kitchen, and spacious piazzas, it affords an airy, cool, and comfortable home.* It was built about two years ago, at a cost of about \$3,000.

Storage Battery Motors.

To try and try again, even though the promise is small, to overcome one obstacle and then another, cer-

* See ARCHITECTS AND BUILDERS EDITION OF THE SCIENTIFIC AMERICAN of May, 1887, which contains the floor plans, and which gives a description of the construction and the materials used in both these buildings. Single copies, 25 cents, or \$2.50 a year.



AN ATTRACTIVE CHEAP DWELLING HOUSE.