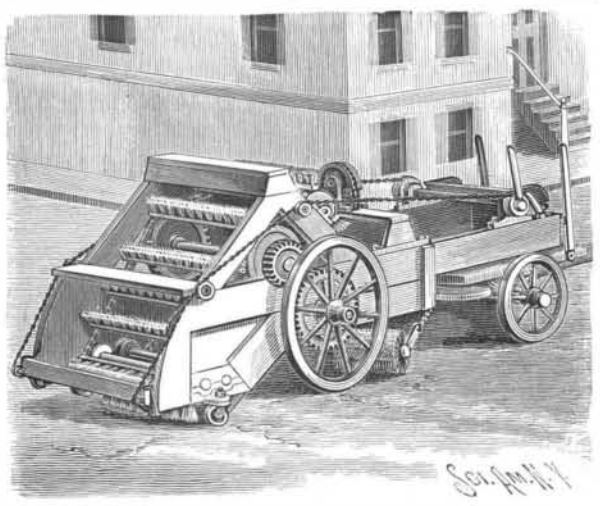
AN IMPROVED STREET SWEEPER.

This machine delivers its sweepings into a vehicle, of which the sweeping mechanism forms a part, means being provided for conveniently dumping the vehicle and for readily lifting the sweeping mechanism from contact with the ground, as desired, when the machine is to be moved from place to place. The improvement has been patented by Mr. Frederick W. Dessau, of No. 10 Willard Street, Amsterdam, N. Y. The body, which receives the sweepings, has a central well, whose rear wall supports an inclined board over which the main brushes operate, between sideboards, in carrying the sweepings up into the vehicle, preventing the escape of dust. The elevator has lower movable sections with caster wheels, which travel on the ground when the machine is in operation, and in these sections are journaled rollers over which pass endless chains, in which are secured the heads of the main brushes or brooms, the chains being moved by sprocket wheels actuated from the main driving shaft, and the latter being driven by gear and clutch connection with the hubs of the rear supporting wheels of the machine.



DESSAU'S STREET SWEEPER.

The lower movable sections of the elevator are held in position for the brushes to contact with the ground by means of latches, but to the latches are attached chains carried over friction rollers to a drum at the rear of the driver's seat, the arrangement being such that by operating a lever the driver can lift the brushes out of contact with the ground. At each side of the machine, in advance of the elevator and main brushes, is a brush set at an angle, to sweep the dirt into the path of the rear brushes, the side brushes being raised from contact with the ground by levers in convenient reach of the driver, the levers being connected by chains with the brush supports, and the arrangement being such that each side broom may be manipulated independently. The dumping is effected by means of chains connected with two downwardly opening doors in the bottom of the vehicle body, the chains extending upward over a flanged segmental drum in central bearings at the top of the machine, the drum having a handle and latch.

AN IMPROVED GUN-SIGHT.

A convenient gun-sight for firearms, which may be readily taken from the gun and carried in the pocket when not in use, is shown in the engraving, and has been patented by Mr. Harold Strandwold, of Trysil, North Dakota. It consists of a standard having a forked lower end and at its upper end a disk with a peep hole. In the forked end of the standard is a clamping screw, whereby the standard may be clamped to a plate held in inclined position on the stock, the plate having longitudinal grooves adapted to be engaged by projections on the lower ends of the forks, as shown in the small sectional view. When the clamping screw is loosened the sight is readily moved forward or backward, as desired, along the stock plate, or can be removed entirely by sliding it off from one end of the plate.

STRANDWOLD'S GUN-SIGHT.

OLD AND NEW BUILDINGS OF NEW YORK.

We have recently illustrated in these columns on several occasions the progress of building in this and other cities. Our present cut gives a view of the lower portion of New York, taken across the East River from the Brooklyn shore, and brings into vivid relief the contrast between the old and the new. The background of the picture is almost filled with the gigantic buildings erected during the last few years. As a species of bench mark the spire of Trinity Church, seen toward the right of the cut among the buildings may be referred to; this in its day was the highest structure within the area which we show. Now it is dwarfed. In the extreme right of the picture is the beautiful building of the Lawyers' Title Insurance Company, now barely completed. Next to it on the left towers up the building of the Mutual Life Insurance Company, its walls surmounted by a loggia just under the roof. This top story is devoted to the uses of the Insurance Club of New York City, containing restaurant, reception rooms, and the like. The open corridor surrounding the rooms it is designed to close by glass for the winter. Higher than this building, and further to the left, surmounted by a tower and dome, is the great Manhattan building, the tallest office building in the world. It fronts on Broadway with seventeen stories, 242 feet from curb to parapet, while the dome and tower rise 108 feet more, giving a total of 350 feet. Its foundations, laid by caissons, go down over 50 feet below the street level. It contains its own independent electric light and power plant.

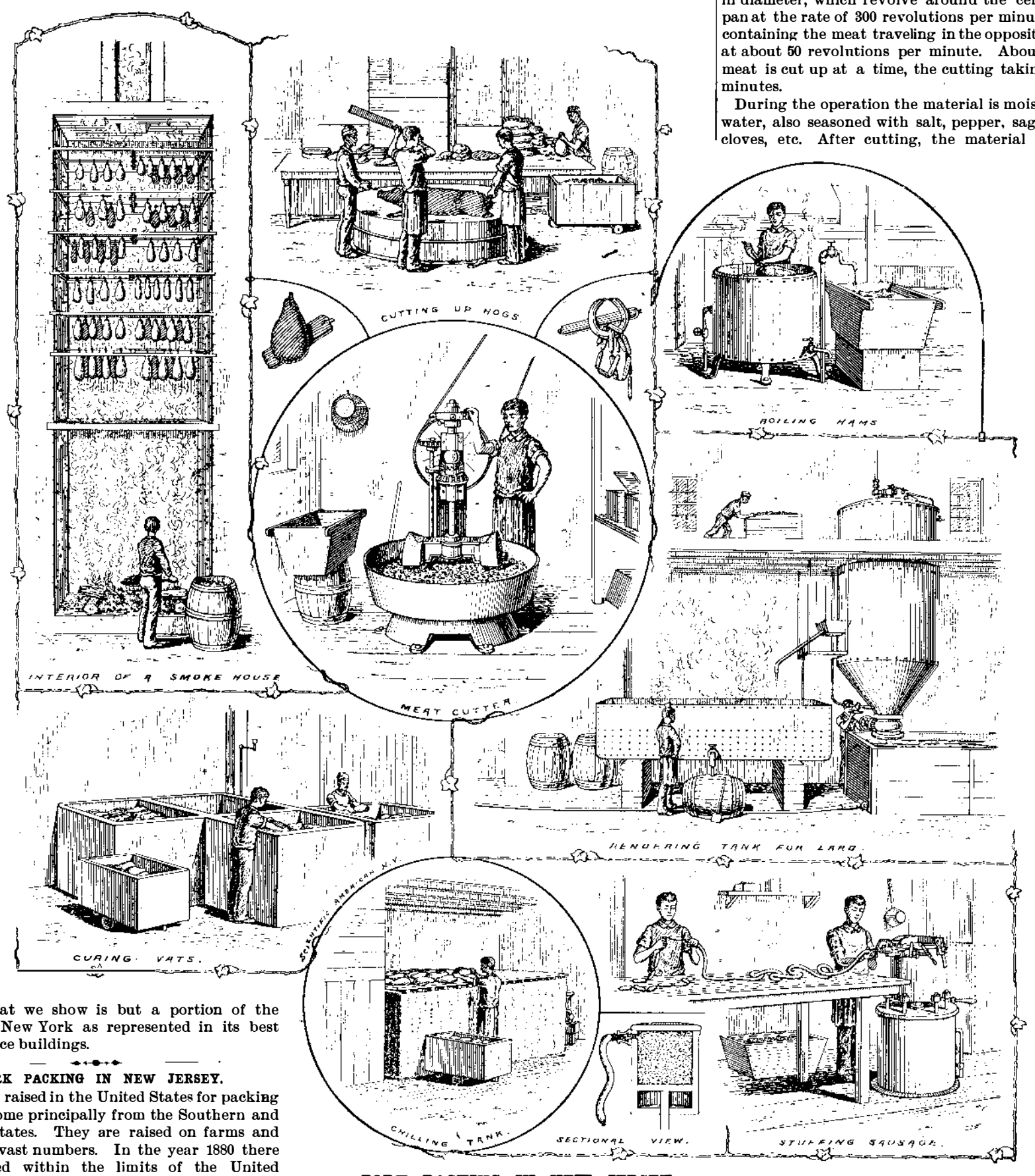
Other buildings only inferior to it in height surround it on all sides. Referring to the cut, between the lower stories of the Manhattan Life building and the spectator is the Wallace building. As we go downtown, the Custom House in Wall Street, famous in its days in the way of impressive architecture, is almost hidden. A little to the left of the center of the picture is seen the small hemispherical dome of the Washington building, No. 1 Broadway, and a little to its left appear the Welles building and the Standard Oil building, all situated on Broadway. Still keeping to the left, we find the low tower of the Cotton Exchange and immediately back of it the very tall tower of the Produce Exchange. Further down town the United States Army building, almost fort-like in appearance, can be seen.

The foreground of the picture presents a different scene. South Street, entered by Burling Slip, Fulton Street, Beekman Street and Peck Slip, appears, with old and new houses intermingled, the old ones with their gable roofs, never exceeding four stories in height, presenting a great contrast to their near neighbors, the giant office buildings already described. Peck Slip is seen on the extreme right of the picture, while South Street runs along the river edge. It is in this corner of the picture that some of the most

THE CHANGING ARCHITECTURE OF NEW YORK.

distinctively old buildings are seen. Back of this region is the old time United States Hotel, one of the oldest hostelries of the city, with its square tower and cupola presenting an interesting reminiscence of the past. Fulton Market and the wholesale Fish Market are seen occupying prominent positions on South Street. Off the fish market lies a fleet of fishing smacks, representatives of one of the best developments of old time naval architecture, while in the foreground the propeller Richard Peck, of the New Haven line, is a representative of the most advanced type of Sound steamer.

It would be very difficult to approximate the millions of dollars represented by the steel framed, fireproof buildings of the downtown business district of New York. What we show is but a portion of the wealth of New York as represented in its best class of office buildings.



PORK PACKING IN NEW JERSEY.

The hogs raised in the United States for packing purposes come principally from the Southern and Western States. They are raised on farms and ranches in vast numbers. In the year 1880 there were reared within the limits of the United States, 49,772,700 hogs. The pork packing industry is carried on principally in the Eastern and Western cities. In this part of the country (Jersey City) the first process is the cutting up of the pork. A hog is first halved or split lengthwise, then placed on a circular chopping block about 6 feet in diameter and about 2 feet in height. The operator then with a 22 inch cleaver cuts the animal up into hams, shoulders, bacon, etc. As soon as the parts are severed the attendants, by means of hooks, pass the pieces along to the trimmer, who cuts and trims the hams, etc., into shape. An expert cutter can cut up 120 hogs per hour, making 17 cuts for each hog. After the parts are trimmed they are put into trucks and taken to the chilling room. The chilling tank is made of iron, 15 feet in length, 7 feet in width, and about 5 feet in height, and contains about 2,500 gallons of brine, at a temperature of about 8° to 10° above zero. On top of the tank is a wooden frame, upon which are placed about 300 hams, etc. These hams, etc., are left to chill for about 24 hours, which takes out the heat and prepares them for curing. The curing vats are made of artificial stone. They are about 4½ feet square, 5½ feet in depth and about 6 inches in thickness. About 3,500 pounds of the meat is placed into each of these vats in a 65° solution composed of water, raw sugar, and salt and left for thirty-five days. At the expiration of five days, the top pieces are placed down at the bottom and then left for the remaining number of days. After curing they are removed from the vats and placed into hogsheads of cold water and soaked for about ten hours, the soaking process drawing out the salt and also preventing them from turning white after leaving the vats. After soaking they are laid on benches and a cord run through the shanks, and then carted to the smoke house. The smoke house is made of brick and is from top to bottom about 25 feet in height and 6 × 10 feet in width. The hams, etc., are hung on circular iron rods, the ends of which rest on iron bars set into the brickwork a few feet apart, one over the other. About 375 hams are strung on these rods at a time, the pieces being placed so as not to touch each other. A hickory wood fire is then started at the bottom of the house and about a half barrel of mahogany sawdust thrown on, which smoulders and throws out the smoke, which ascends upward through the rows of hams above, slowly smoking and coloring them. After smoking for 15 to 20 hours, they are taken out and are ready for market. Hams that are to be boiled go through the same process of curing as the others. After being soaked, the bone is taken out and the ham tied up with strong twine, each ham taking about 6 feet. About 40 of the hams are then put into a jacket boiler, which has first been heated up to a boiling point and allowed to simmer for 4½ hours. These boilers are 4 feet in diameter and about 4 feet in depth. The hams shrink in cooking about two ounces to the pound. The bellies of the hogs also go through the curing process, and are salted and packed into wooden boxes in 550 lb. lots and shipped to all parts of the country. The trimmings from the pork are made into sausage, bologna, etc. The meat is first cut up into about 3 inch chunks and put into a revolving meat cutter. The circular pan in which the meat is placed is about 36 inches in diameter and about 14 inches in depth, the bottom of which is made of hickory blocks securely pinned together. The meat is cut up by four circular knives, 12 and 9 inches in diameter, which revolve around the center of the pan at the rate of 300 revolutions per minute, the pan containing the meat traveling in the opposite direction at about 50 revolutions per minute. About 300 lb. of meat is cut up at a time, the cutting taking about 10 minutes.

During the operation the material is moistened with water, also seasoned with salt, pepper, sage, allspice, cloves, etc. After cutting, the material is put into wooden trays and taken to the sausage stuffer. The stuffer is an iron cylinder 18 inches in diameter and 24 inches in depth, and is securely bolted to the top of a circular steam chest. At the bottom of the stuffer is an accurately fitting plunger or piston, which connects with the steam chest. About 80 lb. of the chopped meat is put into the stuffer and the cover clamped down. The steam is then turned on at a pressure of 60 lb., which forces the plunger upward, which, in turn, presses the material up against the cover, the chopped meat finding an outlet through two small spouts connected to the side of the upper part of the stuffer. The meat is forced from the stuffer into the casings of hogs, beef, and sheep. The casings are drawn over the spouts by the hands, and, when full, the supply of material is cut off by means of a gate, which can be opened and closed by the operator. Some of these casings are thirty yards in length. Two