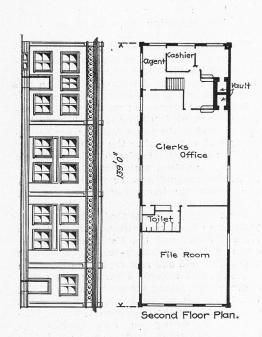
drawn copper, of weights ranging from 166 lbs. to 435 lbs. per mile of wire. The conductor weight per mile, aside from mechanical considerations, is a question of transmission efficiency; with a given talking efficiency the conductor weight increases with the length of the line. Mechanically, a copper wire weighing less than 150 lbs. per mile is usually unsatisfactory, because of insufficient tensile strength to meet all con-

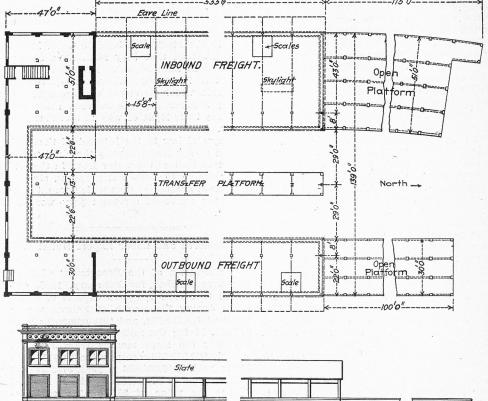
Y., N. H. & H. from New York to Boston.

New B. & O. Freight House at Columbus.

The Baltimore & Ohio has recently completed the rebuilding of the freight terminals for its Newark Division at Columbus, Ohio. These include a new teaming yard and

boken, N. J., to Elmira, N. Y., and the N. is laid on 4-in. x 6-in. sleepers bedded in sand filling put in between the side walls up to the proper level. The sides of the building are enclosed with steel rolling doors between each pair of posts, giving clear openings 8 ft. high by 15 ft. wide. On the track side a platform 8 ft. wide extends the entire length of the building and is covered by the roof overhang. The center line of the unloading track is 5 ft. 6 in. out from the edge





Elevation of Outbound Freight House. Plan and Elevations of New B. & O. Freight House at Columbus.

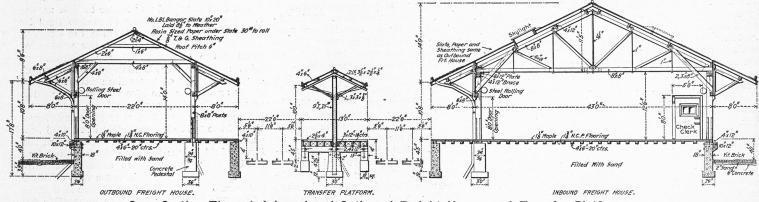
The limit of distance with a conditions. ductor weighing 166 lbs. is about 500 miles; the limit with a 435-lb. conductor is about 1,200 miles; these figures presume no cable or switchboards in the circuit-merely a standard telephone set at each end of the line. The existence of cable of any considerable length impairs transmission and the losses must be compensated for by larger line conductors. For very long lines it is economy to use larger sizes of conductors in cables than for short lines. The most economical cable from a telephone standpoint is one having dry paper insulation, with the two conductors of a circuit twisted together and the pairs arranged in reversed spiral layers and encased in a lead sheath.

Following are the names of the companies which have long distance metallic circuit trunk lines: Illinois Central; Chicago, Bur-

a large new inbound and outbound freight house and office building. The general arrangement of the freight houses and office is shown in one of the accompanying drawings. The inbound and outbound houses are 533 ft. 6 in. long and are parallel to each other, being separated by four unloading tracks and a covered transfer platform which is of the same length. The office building containing the division freight offices is a two-story brick building, 47 ft. deep and

of this platform. The roof of the freight house is supported on wooden trusses of long leaf Georgia pine and is covered with slate. Skylights 4 ft. x 16 ft. are inserted above every third bay to provide top light when the rolling doors are down. Six scale platforms are provided and two small booths for the check clerks.

The outbound house is the same length as the inbound house, but is only 22 ft. wide. It is built in the same manner as the in-



Cross-Section Through Inbound and Outbound Freight Houses and Transfer Platform.

lington & Quincy; Pennsylvania; Lehigh Valley; Delaware, Lackawanna & Western; New York, New Haven & Hartford.

The Illinois Central's telephone line extends from Chicago to New Orleans; the Chicago, Burlington & Quincy's from Chicago to Burlington, Iowa; the Pennsylvania's from New York to Pittsburg and from Philadelphia to Washington; the Lehigh Valley's from Jersey City to Sayre, Pa.; the Dela-

freight houses at the south end. At the north end an open platform the width of each of the freight houses extends out 100 ft. beyond the buildings.

The inbound freight house is of frame construction 43 ft. wide out to out of posts and 12 ft. 6 in. from floor to bottom chord of roof girders. It is built on concrete wall and pier foundations and the floor is 4 ft. above the ware, Lackawanna & Western's from Ho-level of the roadway and tracks. The floor

extending across the entire width of the two bound house with rolling steel shutters in each bay on both the street and track sides. Eleven scale platforms are provided. transfer platform is 13 ft. wide and is built on concrete piers. The floor is 21/2-in. x 4-in. Georgia pine laid on 3-in. x 12-in. joists which rest in turn on 4-in. x 12-in. floor beams on top of the piers. An umbrella shed covers the entire length and width of the platform. It is supported by 9-in., 21-lb. Ibeam central columns spaced 15 ft. 8 in. centom of the concrete piers. The drainage from Galveston Island.

of construction of the buildings.

ter to center and extending down to the bot- Galveston Bay to connect the mainland with

the roof is carried off from the gutters A law giving the Railroad Commission through down spouts brought in from each authority to require a railroad company to side to the supporting columns and connect- construct sidings or spur tracks to private ing under the floor with the city sewer. The industries and authorizing railroads to condrawings show the other principal details nect where their tracks are within one mile of each other, and to require them to connect, upon order of the Railroad Commis-

The exports of provisions for the eight-month period decreased from \$107.-732,255 in 1904 to \$97,058,848 in 1905. The total exports of provisions, including cattle. hogs and sheep, for February, 1905, were valued at \$16,433,483, compared with \$16,-125,089 in 1904; for the twelve months in 1904, \$190,282,133, compared with \$199,472,-565 in 1903; for the eight months ending