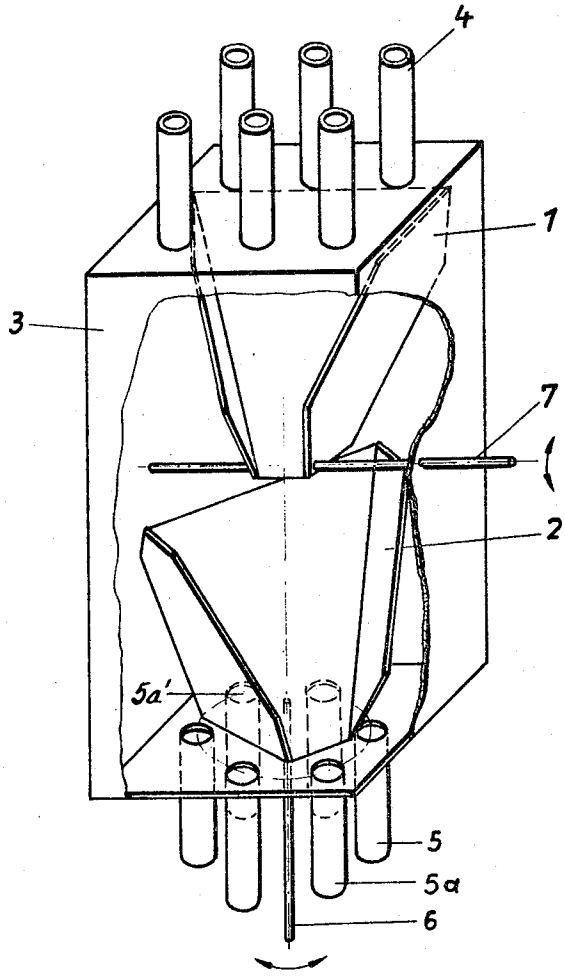
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CENTRAL BRANCH-OFF IN PNEUMATIC TUBE SYSTEMS

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1

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CENTRAL BRANCH-OFF IN PNEUMATIC TUBE SYSTEMS

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3 Claims. (Cl. 243—29)

The invention relates to a central branch-off for pneumatic tube systems. Such central branch-off facilities which provide a connection from one of several incoming dispatch tubes to one of several outgoing dispatch tubes are always arranged vertically in order to use the gravity of the dispatch carriers for their conveyance. Above and below the branch-off facility, the dispatch tubes are then led into the horizontal position through elbows. This results in a rather high construction to accommodate the branch-off facility, requiring frequently several floors in a building. However, it is desirable to considerably reduce said height of construction so that the pneumatic tube system can be installed within a lower building or in one single floor. The object of the invention is to construct a central branch-off facility which corresponds to the aforementioned requirements and which permits reduction of the expenditure for such an arrangement.

There are arrangements known in which, between the exits of the incoming dispatch tubes and the entrances of the outgoing tubes, two or more branch-off blades are arranged one above the other. The number of possible connections is very high in such arrangements, but the construction height of the entire facility is rather large. The facilities known are rather complicated in construction, control, and maintenance since they require, in order to obtain a maximum number of possible connections, at least in one of the branch-off planes several branches, and in the bottom-most branching plane one blade for the connection for two outgoing tubes.

According to the invention, the number of branches and the pertinent controls in a central branching facility of the kind known with branching blades arranged one above the other can be reduced in that the lower branch blade is rotatable around a vertical axle and so constructed that a guiding device for the dispatch carriers is made with each side to the input of one of the receiving tubes, disposed in a circle.

The bottom branching blade has a rest position and an operative position on either side of said rest position, and each of these three positions coincides with one of the outgoing tubes entrances arranged on said circle on the two sides facing each other.

The invention is explained now with the air of an example and the sole drawing. The two franching blades 1 and 2 are accommodated in a casing 3 one above the other, into which casing the incoming dispatch tubes 4 enter at the top. At the bottom side of the casing 3, the outgoing tubes 5 leave it. They are arranged in a circle through the center of which the axle 6 of the rotatable branching guide 2 passes. The branching blade 1, located above the blade 2, can be swivelled around the

2

axle 7. Both axles are operated by separate drive mechanisms, most suitably of the electromechanical type. The branching blade 1 is funnel-shaped so that it can hold the dispatch carriers leaving the tubes 4. Its bottom opening will be swivelled over the funnel-shaped opening of the rotatable guide blade 2 in such a way that always a connection to one or to the other side of the symmetrically designed blade 2 is obtained. The drawing shows a position in which a connection for the dispatch carrier arriving through one of the tubes 4 with the outgoing tube 5*a* is obtained. When the branching blade 1 is swivelled into its other position, a connection with the other drive tube 5*a'* on the opposite side is obtained. The blade 2 can now be swivelled so that always one outgoing entrance is available. Corresponding to the position of the branching blade 1, connections with the outgoing tube entrances on the opposite sides are made.

While I have described the principles of my invention in connection with specific apparatus, it is to be clearly understood that this description is made only by way of example and not as a limitation to the scope of my invention as set forth in the accompanying claims.

I claim:

1. A central branching-off facility for pneumatic tube systems to connect one of several incoming dispatch tubes with one of several outgoing tubes in a casing into which the incoming dispatch tubes enter from the top and the outgoing tubes leave at the bottom, said facility having two branching blades, arranged one above the other between the respective exits of the incoming dispatch tubes and the entrances of the respective outgoing tubes and in which the upper branching glade can be swivelled around a horizontal axle so that a connection with two sides of the casing facing each other can be made, further comprising means disposing said bottom branching blade about a vertical axis, swivelling means coupled to said bottom branching blade to rotate said bottom branching blade about said vertical axis to provide a guide facility for the dispatch carriers with each side to the entrance of one of the outgoing tubes leaving the casing at the bottom.

2. A central branching-off facility according to claim 1, wherein the exits of the incoming dispatch tubes on the top of the casing are arranged in a rectangle and the entrances of the outgoing tubes on the bottom side of the casing are arranged in a circle.

3. A central branching-off facility according to claim 1, wherein said bottom branching blade has a rest position and an operative position on either side of said rest position, and wherein each of said positions coincides on the sides facing each other with the entrance of one of the outgoing tubes.

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