

C. D. PALMER.
 APPARATUS FOR DISTRIBUTING PAPERS.
 APPLICATION FILED MAR. 20, 1913.

1,119,531.

Patented Dec. 1, 1914.

2 SHEETS—SHEET 1.

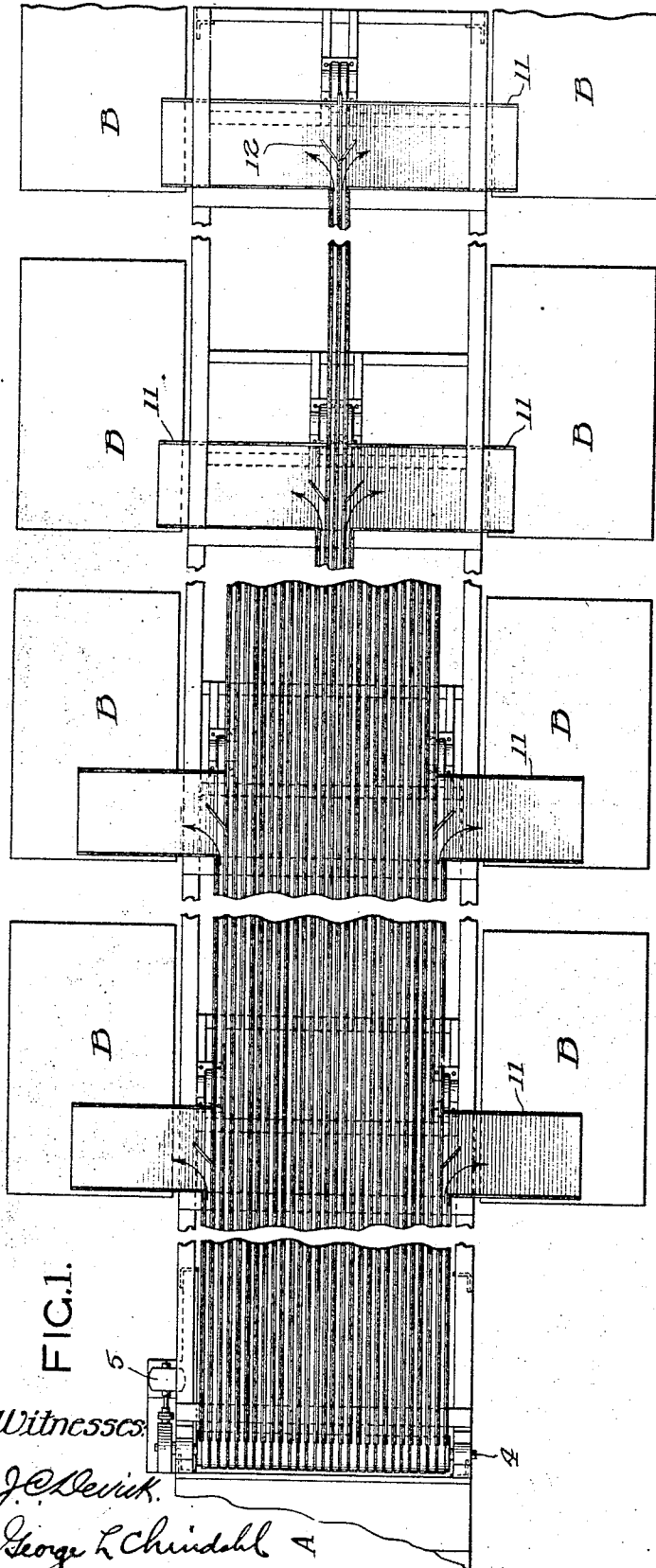


FIG. 1.

Witnesses

J. C. Devick.

George L. Chindahl

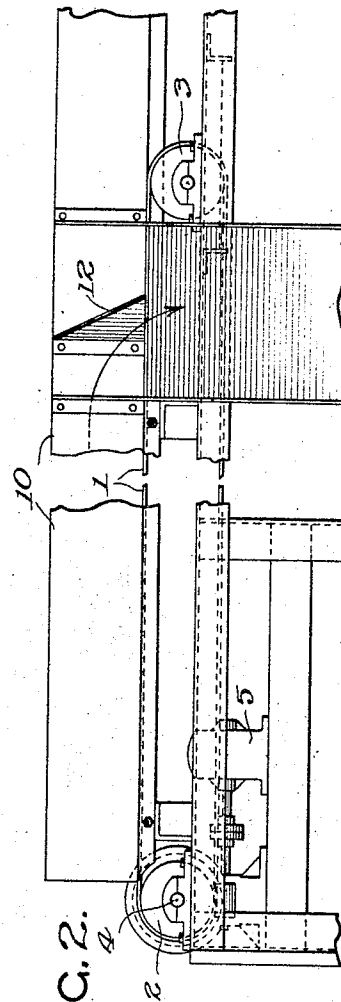


FIG. 2.

Inventor:

Clinton D. Palmer.

By Luther L. Miller
 atty.

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2 SHEETS—SHEET 2.

FIG. 3.

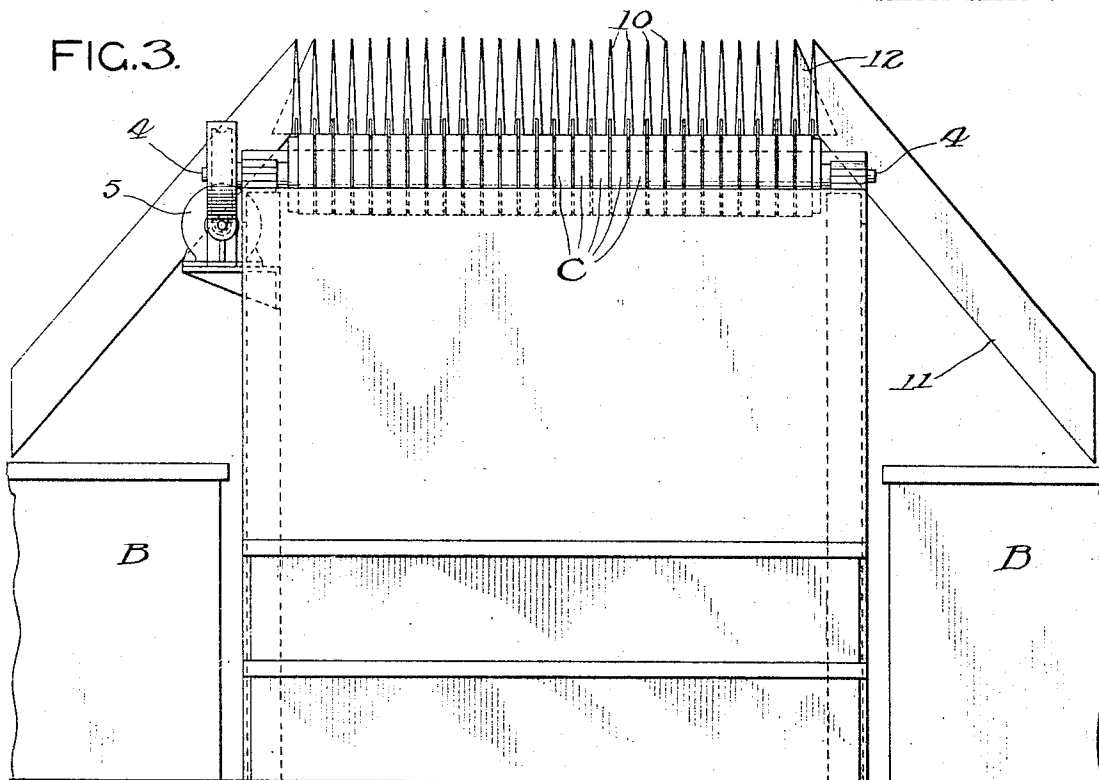
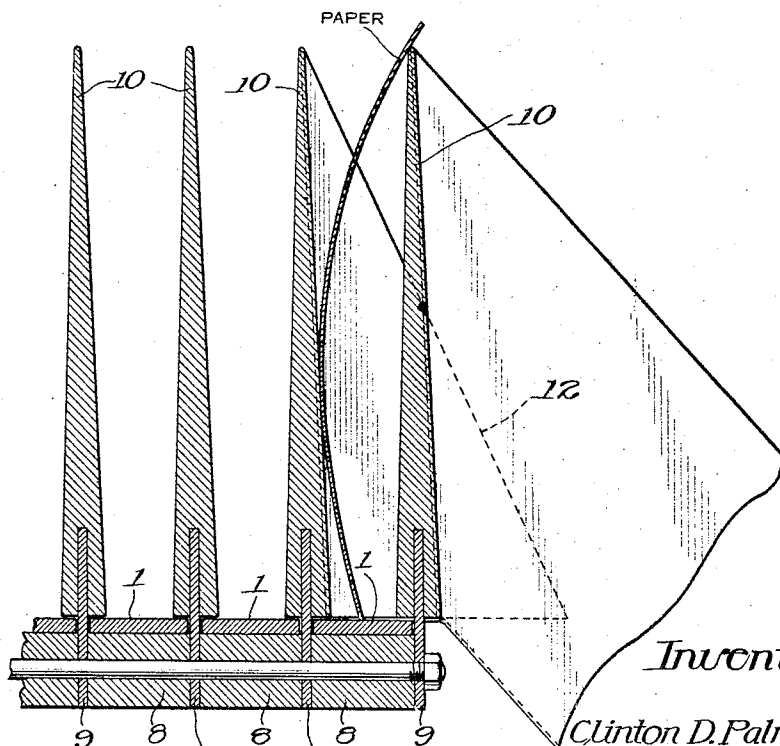


FIG. 4.



Witnesses:

J. C. Devick.
 George L. Chindahl

Inventor:

Clinton D. Palmer.

By Luther L. Miller
 Atty.

UNITED STATES PATENT OFFICE.

CLINTON D. PALMER, OF CHICAGO, ILLINOIS, ASSIGNOR TO SEARS, ROEBUCK AND CO.,
OF CHICAGO, ILLINOIS, A CORPORATION OF NEW YORK.

APPARATUS FOR DISTRIBUTING PAPERS.

1,119,531.

Specification of Letters Patent.

Patented Dec. 1, 1914.

Application filed March 20, 1913. Serial No. 755,598.

To all whom it may concern:

Be it known that I, CLINTON D. PALMER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Apparatus for Distributing Papers, of which the following is a specification.

This invention relates to apparatus intended particularly for use in large mercantile establishments for distributing letters, orders and other papers and documents from a given point to a plurality of desks or departments where such papers or documents are to be used or filed.

In the accompanying drawings, Figure 1 is a top plan view of an apparatus embodying my invention, with parts broken away to shorten the view. Fig. 2 is a fragmental side elevation. Fig. 3 is a view of the head end of the apparatus on an enlarged scale. Fig. 4 is a fragmental sectional view.

In Fig. 1, A denotes the head end of the apparatus, and B a series of desks to which the papers are to be distributed. The distributing apparatus comprises a plurality of belt conveyers C, one conveyer being provided for each desk B to be served. The conveyers C are of various lengths, to correspond with the locations of the desks B. While these desks may be arranged in any suitable or preferred manner, they are herein shown as arranged in two parallel rows, the conveyers B extending parallel to one another through the space between the rows of desks B.

Each conveyer C comprises a relatively narrow belt 1 extending over a drive pulley 2 and a pulley 3. The pulleys 2 of the various conveyers are herein shown as mounted upon a drive shaft 4. Any suitable means may be provided for rotating the shaft 4, as for example, an electric motor 5, the armature shaft of which is connected by means of gearing to the shaft 4. Each pulley 3 is suitably supported in the framework of the machine. The upper reach of each conveyer belt 1 is supported between the pulleys 2 and 3 by means of a rail 8.

In order to economize space, the papers are arranged to be carried on edge by the conveyers. Accordingly the belts are made narrow, as hereinbefore stated, and the conveyers are separated by partitions of such height that the papers will stand on edge

upon the belts. Herein I have shown the partitions as consisting of metallic plates 9 extending longitudinally between the rails 8, the upper edges of said plates extending above the plane of the belts. Upon the upper portions of the plates 9 are partition members 10, the lower edges of said partition members overhanging the edges of the belts, so as to prevent the papers from getting caught between the edges of the belts and the plates 9. In the form herein shown, the partition members are made tapering from their lower to their upper edges.

As stated, each conveyer terminates opposite a desk B. Suitable means may be provided for conducting papers from each conveyer to its associated desk, as, for example, a chute 11 having its upper or inlet end arranged in proximity to the discharge end of the conveyer belt. To deflect the papers off the belt and into the chute, suitable means may be used, such as a guide or wing 12 supported in a suitable manner as by attachment to the inner partition member 10 for the given conveyer, said guide extending at an angle to the direction of the movement of the belt.

In use a clerk stationed at the head end of the machine places the papers on the conveyers in accordance with a predetermined classification, so that each desk B shall receive the papers intended for it.

By the use of the apparatus herein disclosed, the messengers or clerks heretofore required for the distribution of papers to various desks or departments, are dispensed with. The placing of the papers upon the conveyers as the sorting progresses, takes no more time than would be consumed in placing the papers in other receptacles under the system of manual distribution heretofore practised.

By reason of the fact that the papers are conveyed on edge, the conveyers may be made relatively narrow, thus effecting economy in the use of space. The use of partition members overhanging the edges of the belts renders it possible to convey the papers on edge, since the papers can not become caught between the edges of the belts and the guides between which the belts travel.

I claim as my invention:

1. In a distributor for papers, a group of long-distance conveyers having adjacent receiving ends and separated termini, each of

said conveyers comprising an individual belt, a rail extending beneath and supporting each of said belts, individual pulleys supporting one end of each of said belts, a station at each terminus, and means for directing papers from the termini of the conveyers to the station.

2. In a distributor for papers, a group of conveyer belts arranged side by side, each belt being of materially less width than the papers, and a single tapering partition between every two belts, said partitions over-

hanging the edge portions of the belts to keep the papers from the edges of the belts, and said partitions being of sufficient height to maintain the papers in approximately vertical position. 15

In witness whereof, I hereby affix my signature in the presence of two witnesses.

CLINTON D. PALMER.

Witnesses:

NICHOLAS A. WEILAND,
C. M. GANNON.