

G. A. RIGHTER.
SELECTOR APPARATUS.
APPLICATION FILED DEC. 4, 1920.

1,412,631.

Patented Apr. 11, 1922.

4 SHEETS—SHEET 1.

Fig. 1.

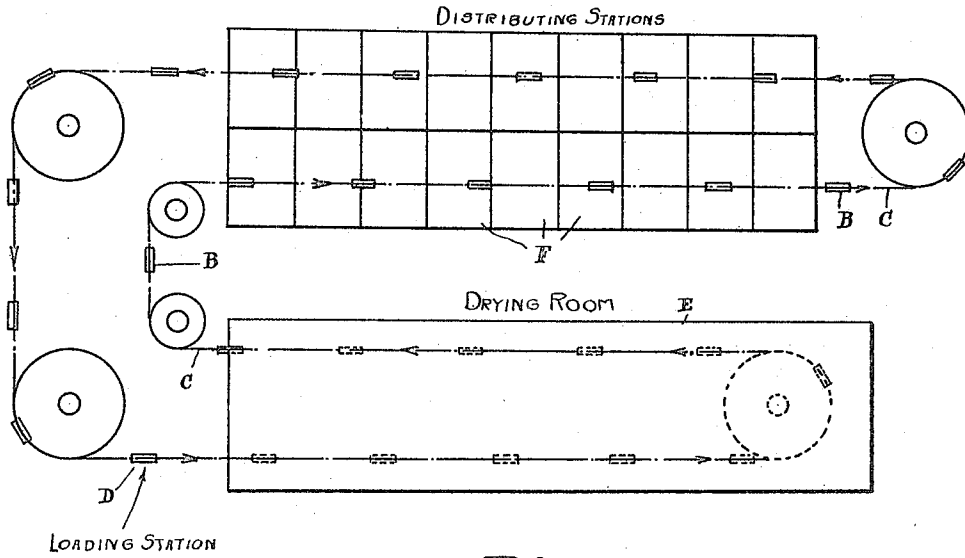


Fig. 2.

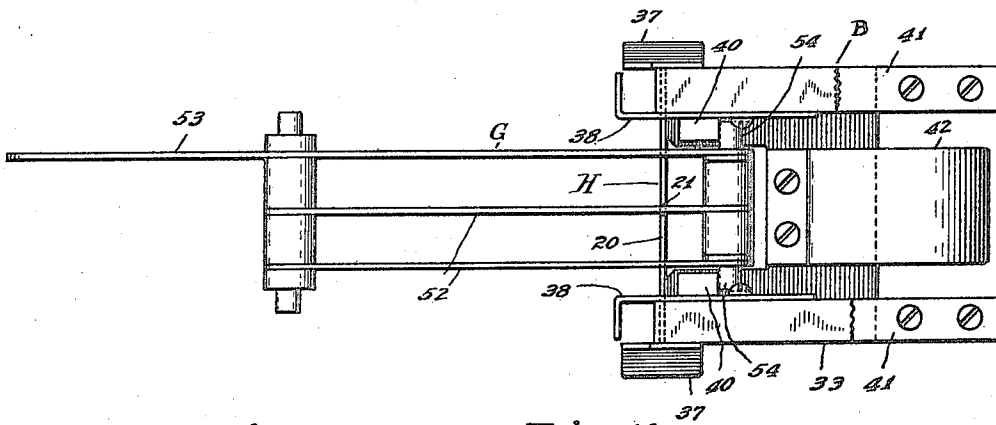


Fig. 13.

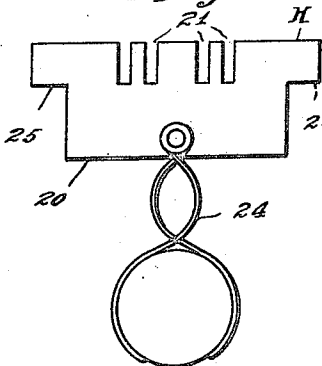
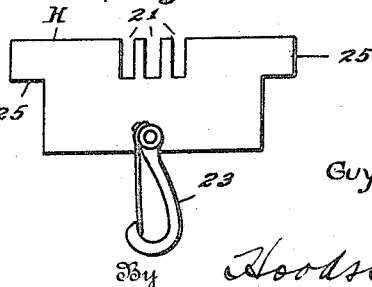


Fig. 14.



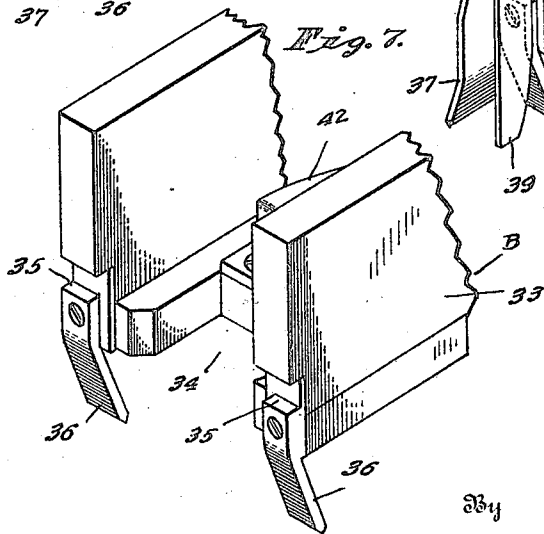
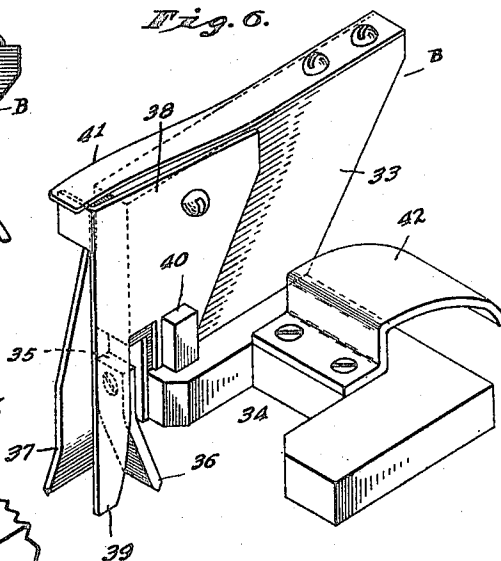
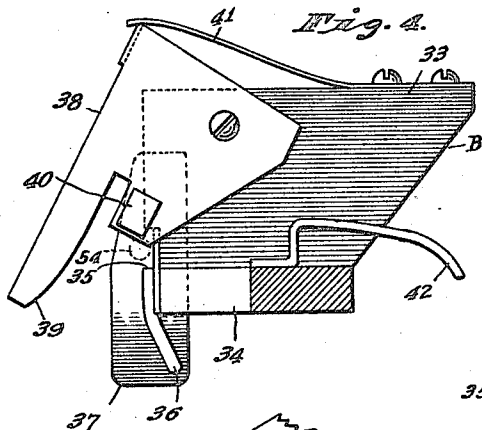
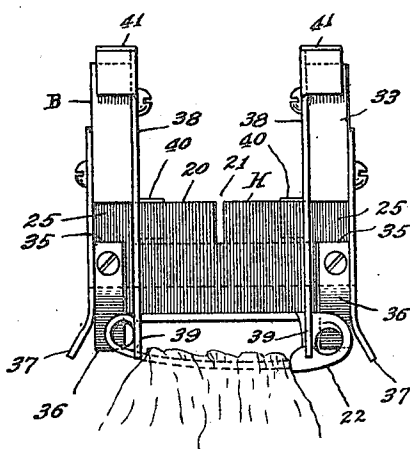
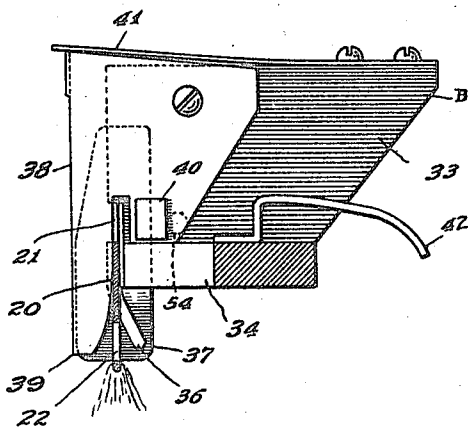
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4 SHEETS—SHEET 2.

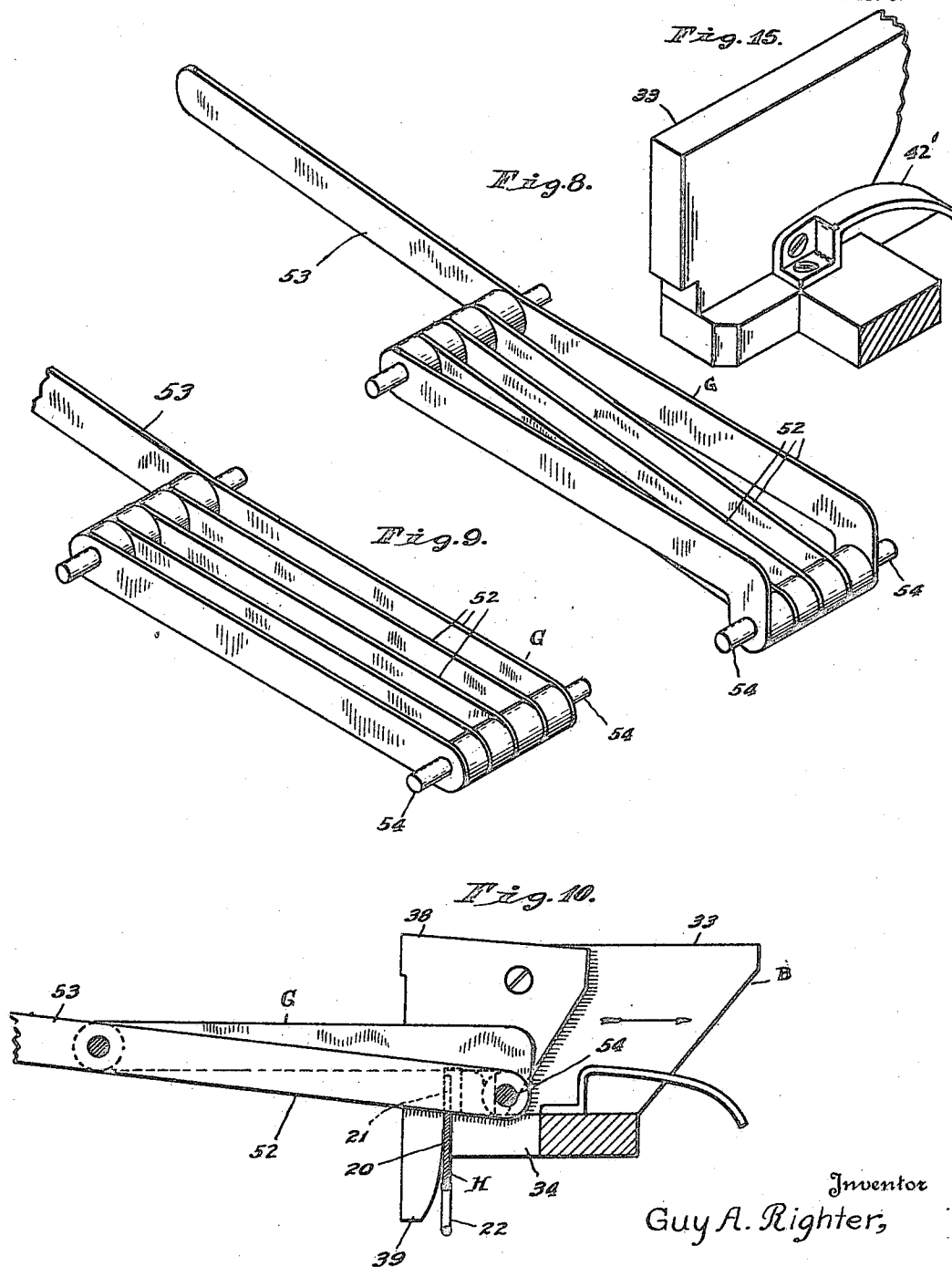


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4 SHEETS—SHEET 4.

Fig. 12.

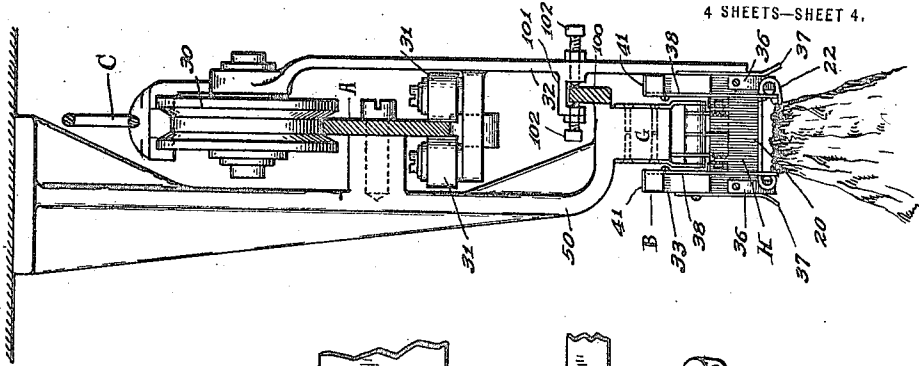
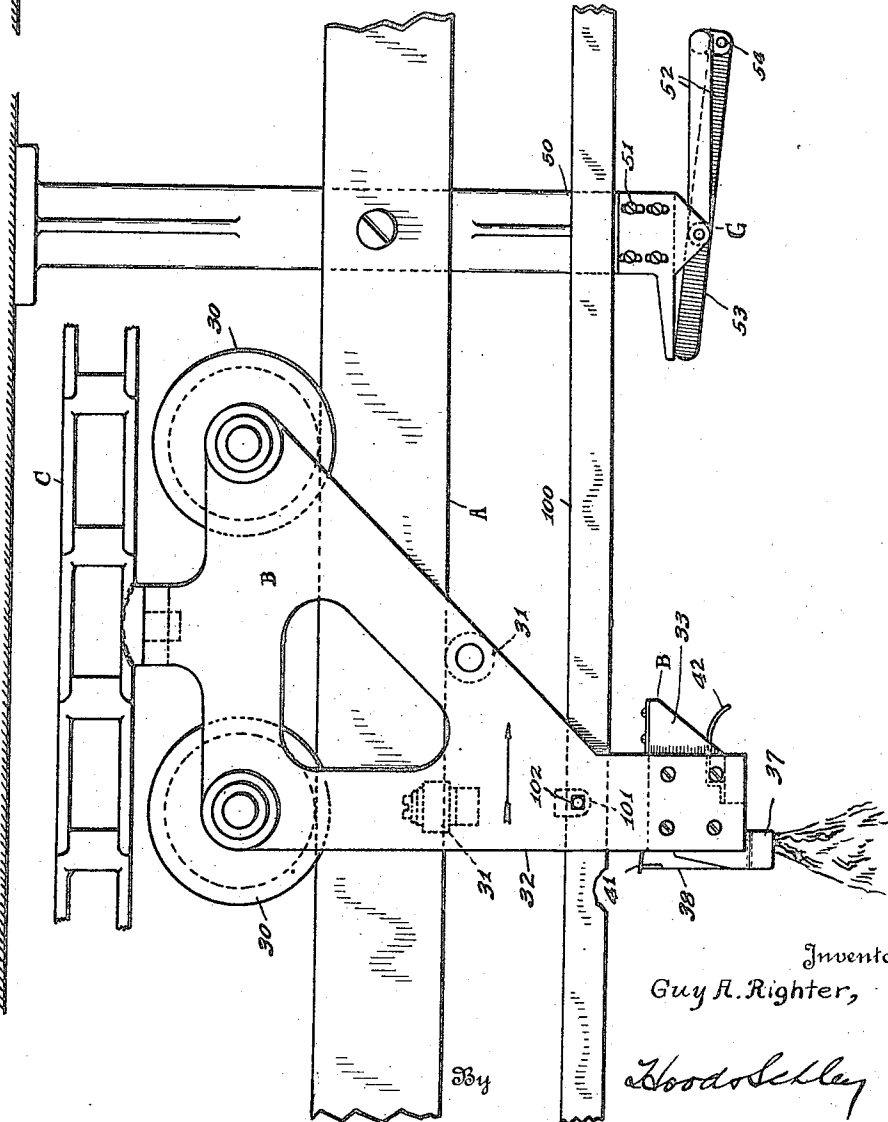


Fig. 11.



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UNITED STATES PATENT OFFICE.

GUY A. RIGHTER, OF RICHMOND, INDIANA.

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1,412,631.

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To all whom it may concern:

Be it known that I, GUY A. RIGHTER, a citizen of the United States, residing at Richmond, in the county of Wayne, and State of Indiana, have invented a new and useful Selector Apparatus, of which the following is a specification.

In commercial laundries, it is practically unavoidable that the properties of many people become intermingled and sorting and distribution form considerable items of expense.

The object of my invention is to produce simple apparatus, a portion of which may be attached to each article (upon its arrival at the laundry, or at its point of emanation, and at a time when all articles of a group are together) by which, as a final operation preliminary to bundling, a heterogeneous quantity of articles may be automatically separated into desired groups.

When the apparatus has been fully described, it will be readily appreciated that the apparatus may be easily adapted for use in many other ways without departing from my invention.

The accompanying drawings illustrate my invention.

Fig. 1 is a diagrammatic plan of a complete installation; Fig. 2 a fragmentary plan of one of the selectors, an identifier and a carrier; Fig. 3 a longitudinal vertical section of a portion of one of the carriers and an identifier in place; Fig. 4 a similar view of the same portion of a carrier with a portion in discharging position; Fig. 5 an end elevation of the parts shown in Fig. 3; Fig. 6 a fragmentary perspective of the parts shown in Fig. 3; Fig. 7 a fragmentary perspective of some of the parts shown in Fig. 6; Figs. 8 and 9 perspectives of two companion selectors; Fig. 10, a vertical longitudinal section of a carrier, selector and identifier in position immediately prior to a discharge of the identifier; Fig. 11 a side elevation of a complete carrier and adjacent selector; Fig. 12 an end elevation of the parts shown in Fig. 11; Figs. 13 and 14 elevations of modified forms of identifiers; and Fig. 15 a fragmentary perspective of a slight modification.

In the drawings, I have illustrated apparatus especially designed for use in a laundry and A indicates an endless track supporting a series of carriers B which are

connected by an endless belt C which may be driven in any desired manner. Associated with the track A are a loading station D, a drying room E, and a distributing station comprising a plurality of bins F adjacent each of which will be arranged an appropriate selector G.

The characteristic element of my device is an identifier H of such character that it may be associated with an article to be identified so as to remain with it during its transportation and manipulation. In the present instance, the identifier takes the form of a thin plate 20 appropriately notched in its upper edge, as at 21, and preferably symmetrically with relation to its middle, so that reversal will be immaterial. An appropriate article-engaging member (safety-pin 22, Figs. 3, 5 and 12; snap-hook, Fig. 14; spring-clasp 24, Fig. 13; or other desirable form) is attached to plate 20. Each plate 20 is provided with end projections 25.

Each carrier B is provided with supporting wheels 30, guard wheels 31, a depending arm 32, and a U-shaped cradle 33. The base of the cradle is centrally notched at its rear edge to form a finger-space 34. At each side of the cradle is a ledge 35 for the reception of a projection 25 of a plate 20, said ledge being conveniently formed by the upper end of an inclined guide 36 and flanked by spring side guards 37. Upon the inner face of each side of the cradle is pivoted a plate 38 provided with a depending finger 39 and a lug 40, the arrangement being such that an identifier may be projected upwardly between guide 36 and finger 39 (momentarily displacing the plate 38 against the action of spring 41) and lodged with its projections 25 resting on ledges 35. The fingers 39 serve to retain the identifiers in place. Forward of notch 34 is a guard cam 42, the purpose of which will appear.

At appropriate points along track A, as, for instance, opposite each bin F, is a hanger 50, conveniently vertically adjustable, as shown at 51, upon which is pivoted an appropriate selector G. In the present form, each selector G comprises a plurality of parallel strips 52, some of which, preferably in groups symmetrical with the longitudinal middle, have their lower edges projecting below the lower edges of others, corresponding in arrangement with the arrangement of notches 21 in the identifiers 20. Downward

movement of each selector is limited by a tail 53 conveniently formed by an extension of one of strips 52.

Each selector is provided, at its end, with lateral projections 54, 54, adapted to take in behind lugs 40.

As a carrier, with its support identifier and associated article, approaches a selector, the lower strips 52 first are engaged by guard 42 and raised so as to just clear the upper edge of the identifier and thus free it from excessive wear. When guard 42 passes the free end of selector G, the selector drops slightly and, if an inappropriate identifier is adjacent, rests upon the upper edge of the identifier as it passes freely beneath, and projections 54 pass over, lugs 40.

If an appropriate identifier is adjacent, its notches permit the selector to drop so as to bring projections 54 in front of lugs 40 so that continued forward movement of the carrier swings plates 38 to the position shown in Fig. 4, thus withdrawing the retaining fingers 39 from behind the identifier and forcibly pushing the identifier off of ledges 35 and permitting it, with its load, to drop into the appropriate bin F.

The identifiers may be thin and of such form as to readily pass through laundry machinery without injury or damage.

In the form of construction shown in Figs. 2-7, inclusive, and Fig. 10, the active surfaces of the selector members 15 will drag upon the guard 42 and will, therefore, be subjected to some wear which might ultimately prove detrimental. In order to avoid this, the guard 42 may be eliminated and guards 42' (Fig. 15) placed one at each side of the line of the selectors 52, so that the projected ends 54 of the selectors will engage and ride over the guards 42'.

In order to insure a proper registration of the successively presented identifiers with the respective selectors, some accurate registry mechanism may be desirable. It will, of course, be readily understood that this registering mechanism may take any one of a number of satisfactory forms and in Figs. 11 and 12, I have shown a construction involving a supplemental guide 100, arranged adjacent each selecting station, in position to be straddled by the gage or registration member 101, carried by each carriage 32, temper screws 102 being provided for accuracy.

I claim as my invention:

1. An apparatus, for the group selection of agglomerated articles, comprising a car-

rier having ledges for the support of an article-supporting identifier, a retaining finger for normally holding such identifier in place on the carrier, an ejector arranged to act upon the identifier, a selector arranged to selectively cooperate with such identifier when in place on the carrier, and means carried by the selector for acting upon the retaining finger and ejector to eject the identifier when permitted by the identifier.

2. An apparatus, for the group selection of agglomerated articles, comprising a carrier having ledges for the support of an article-supporting identifier, a retaining finger for normally holding such identifier in place on the carrier, and a selector arranged to selectively cooperate with such identifier when in place on the carrier.

3. An apparatus, for the group selection of agglomerated articles, comprising a carrier having ledges for the support of an article-supporting identifier, a retaining finger for normally holding such identifier in place on the carrier, a selector arranged to selectively cooperate with such identifier when in place on the carrier, and means carried by the selector for acting upon the retaining finger to eject the identifier when permitted by the identifier.

4. An apparatus, for the group selection of agglomerated articles, comprising a carrier having ledges for the support of an article-supporting identifier, a selector arranged to selectively cooperate with an identifier when in place on the carrier, and means controlled by the selector for ejecting the identifier from the carrier when permitted by the identifier.

5. An apparatus, for the group-selection of agglomerated articles, comprising a plurality of carriers connected, means for driving said carriers over a predetermined path, a plurality of identifiers formed for separable-association and transportation with any one of the carriers, said identifiers having means for association with an article to be carried by the carrier, and a plurality of selectors arranged along the carrier path and each selectively formed to cooperate with appropriately formed identifiers and eject the same from the carriers without disturbing non-appropriately formed identifiers.

In witness whereof, I have hereunto set my hand at Indianapolis, Indiana, this 29th day of November, A. D. one thousand nine hundred and twenty.

GUY A. RIGHTER.