May 24, 1955 W. A. STAHL 2,709,001

SORTING STAMP

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Fig. 1

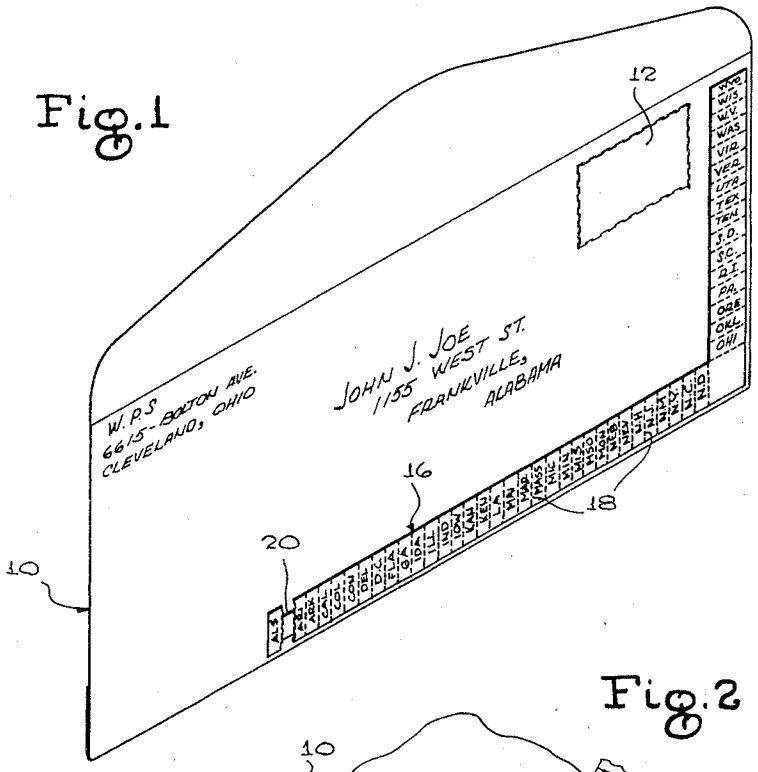


Fig. 2

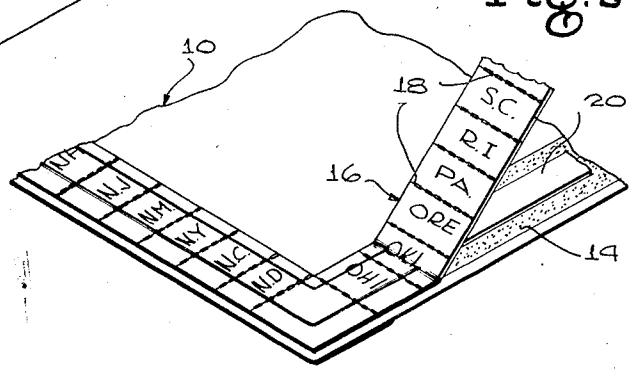
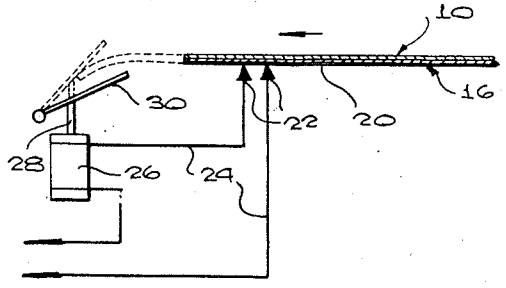


Fig. 3



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SORTING STAMP

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2 Claims. (Cl. 209—3)

This invention relates to a sorting stamp, and more particularly, has reference to an article which can be attached to an object to be sorted, in the manner of a stamp or tab, the sorting stamp constituting the present invention being adapted, in this connection, as a sorting aid to be used in conjunction with any of various electrically-operated sorting or classifying devices.

It is well appreciated that there is, in many businesses, a continuing need for a sorting or classifying means, which will permit the sorting or classification of a large quantity of generally similar objects, such as letters, bills, and the like.

In many instances, the nature of the objects themselves resists efforts to prepare the objects for mechanical or electrical sorting, and as a result, said objects must be sorted or classified manually, with an attendant loss of time and increase in expense.

Letters handled by the various post offices fall within this category, it being apparent that a letter envelope is of such a nature as to preclude its being handled by electrical sorting apparatus. Due to this characteristic of letters sent through the mails, the envelopes handled by the Post Office Department must be manually sorted, so far as their destinations are concerned.

In view of the above, the broad object of the present invention is to provide an electrical sorting aid which can be attached directly, in the manner of a stamp, to each of a number of articles to be sorted, thus to permit said articles to be processed through electrical sorting devices, thereby to facilitate the handling of said articles and accomplish speedier routing thereof concurrently with a substantial reduction in the handling cost.

Another object of importance is to provide a device of the type stated which can be applied to any of various objects, such as envelopes, containers, and various solid, hollow, or unusually shaped objects.

Another object of importance is to provide a stamp-like sorting aid of the type referred to above which, though capable of manufacture in a single form, will still be adapted to assume different shapes when applied to selected, correspondingly shaped objects, the sorting aid forming the present invention being flexible in construction to impart this characteristic thereto.

Yet another object is to provide a sorting aid of the type stated which, though usuable with electrical sorting or or classifying apparatus, can still be manufactured at a very low cost.

Still another object is to provide a sorting aid as stated which can be applied to an object to be sorted swiftly and easily.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a perspective view showing a conventional envelope with the sorting stamp constituting the present invention applied thereto;

Figure 2 is an enlarged, fragmentary perspective view

showing the cover strip of the stamp partially removed, to illustrate the details of construction of the stamp; and

Figure 3 is a somewhat diagrammatic view illustrating the use of the stamp in association with an electrical sorting device.

Referring to the drawings in detail, the reference numeral **10** has been applied generally to an object to be sorted. In the illustrated example of the invention, said object is an envelope, having the usual post office stamp **12**. However, at this point, it is to be understood that the invention can be applied to any object to be sorted, the envelope being merely one example of an object on which the sorting stamp can be used. Said object could, for example, be a flexible or inflexible container of any size or shape. Alternatively, the object to be sorted could be small or large, solid, or hollow. It is mainly important that the object have an exposed area sufficient to receive the sorting stamp constituting the present invention.

In accordance with the present invention, adhesive **14** is applied to the back of a cover strip **16**. The cover strip **16**, in the illustrated example of the invention, is of right-angled formation. However, the strip can be formed simply as a straight strip, the right angled formation illustrated being shown merely to illustrate an adaptation of the invention to an ordinary envelope.

The cover strip **16** is of flexible formation, and as noted above, has its back coated with adhesive. The strip **16**, additionally, is of a non-electrically-conductive material, for a purpose to be made apparent hereinafter.

Provided upon the strip **16**, at intervals spaced longitudinally thereof, are score markings **18**, said markings defining between them removable portions, each of which has a predetermined classification indicium. In the illustrated example of the invention, the indicia are the names of the several States. This particular group of indicia would be used when the sorting stamp is applied to envelopes, for the purpose of allowing said envelopes to be electrically sorted while being processed by the Post Office Department to their proper destinations. In other words, the sender of the letter would remove the portion of the cover strip bearing the name of the State to which the letter is to go.

The cover strip **16** overlies an inner strip **20**, said inner strip being free of score markings, and being coextensive in length with the cover strip. The inner strip **20** preferably is substantially narrower than the cover strip, as best shown in Figure 2, so as to prevent any portion of the inner strip from being accidently exposed.

Additionally, it is important to note that the inner strip **20** is of an electrically conductive material.

In use of the invention, the sorting stamp comprising the cover and inner strips is applied to the object to be sorted. Thereafter, a portion of the cover strip is removed, depending upon the classification to be assigned said object. In Figure 1, the portion marked "Alabama" has been removed, since the letter on which the stamp is used is to go to a destination in Alabama. The removal of a selected portion of the cover strip would be effected, of course, by the sender of the letter.

When the letter is received in the Post Office Department, and is to be sorted as to its destination, it can be processed by any suitable electrical apparatus having bridgable contacts **22**. Thus, I have illustrated schematically a typical electrical sorting device which might be used. In the schematic representation shown in Figure 3, the contacts **22** are provided at the ends of leads **24**, said leads being in circuit with a suitable source of electrical power.

In the circuit there is included a solenoid **26**, having a cord **28**, to which is secured a baffle **30** pivoted at **32**. The baffle **30** can be left in the full line position when

the contacts **22** are not bridged. When, however, the contacts **22** are bridged and a circuit is closed through the solenoid, said solenoid will be energized, causing the cord **28** to be urged outwardly, thereby to shift the object deflector or baffle to the dotted line position.

When the deflector moves to the dotted line position, it will be in the path of the object **10** to be sorted, thereby causing said object to be removed from other objects being processed therewith.

Thus, the exposed portion of the inner strip will serve to bridge the contacts **22**, the particular location of the bridging means being adapted to cause the object **10** to be electrically sorted or classified.

The main characteristic of the invention, of course, resides in its formation as an inexpensive stamp having an electrically conductive means associated therewith, which stamp can be attached to any of various objects that would ordinarily resist electrical sorting or classification.

It is also thought to be an important characteristic of the invention that it can be applied to the selected object with substantial speed, the stamp being so formed as to permit removal of any selected portion therefrom, thus to aid in the subsequent sorting or classification process.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. An electrical sorting and classifying aid comprising, a cover strip of non-electrically-conductive material having adhesive on one face thereof for attachment to an object to be sorted, an inner strip of electrically-conductive material underlying said cover strip, and score markings extending transversely of said cover strip to define a plurality of selectively removable tabs, one of said tabs when selectively removed exposing said inner strip at the location of tab removal, said exposed portion of said inner strip defining a bridge for the spaced contacts of an associated electrical sorting device.

2. An electrical sorting and classifying aid comprising, a cover strip of non-electrically-conductive material having adhesive on one face thereof for attachment to an object to be sorted, an inner strip of electrically-conductive material underlying said cover strip, said electrically-conductive strip being of lesser width than said cover strip, and score markings extending transversely of said cover strip to define a plurality of selectively removable tabs, one of said tabs when selectively removed exposing said inner strip at the location of tab removal, said exposed portion of said inner strip defining a bridge for the spaced contacts of an associated electrical sorting device.

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