(No Model.)

J. H. BETTELEY.

MACHINE FOR ISSUING AND RECORDING TICKETS.

No. 262,357. Patented Aug. 8, 1882.

Fig. 1

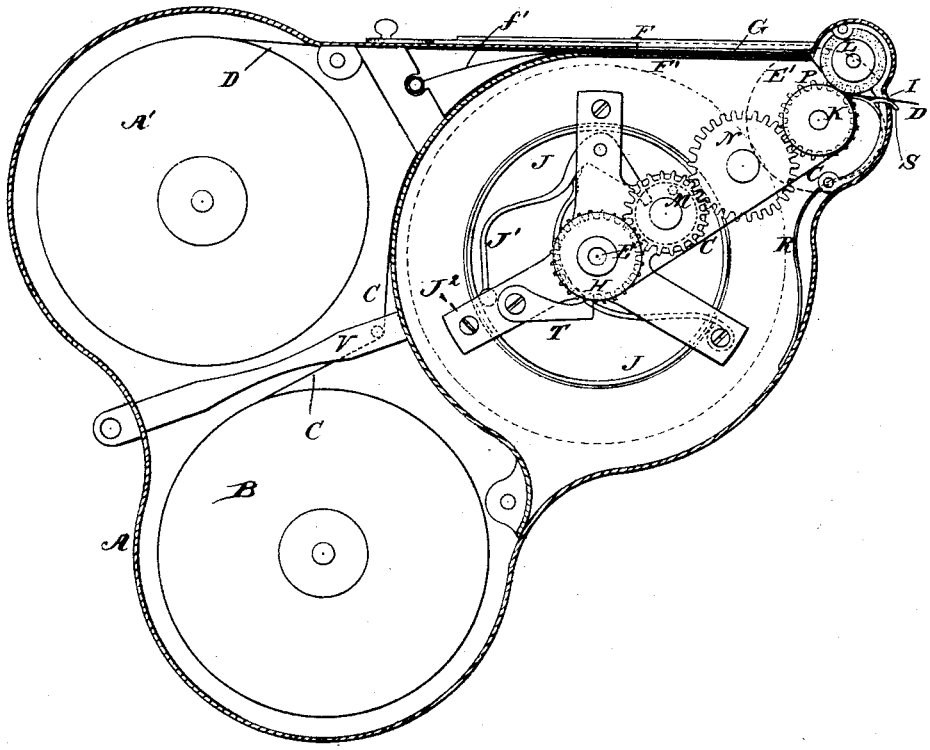
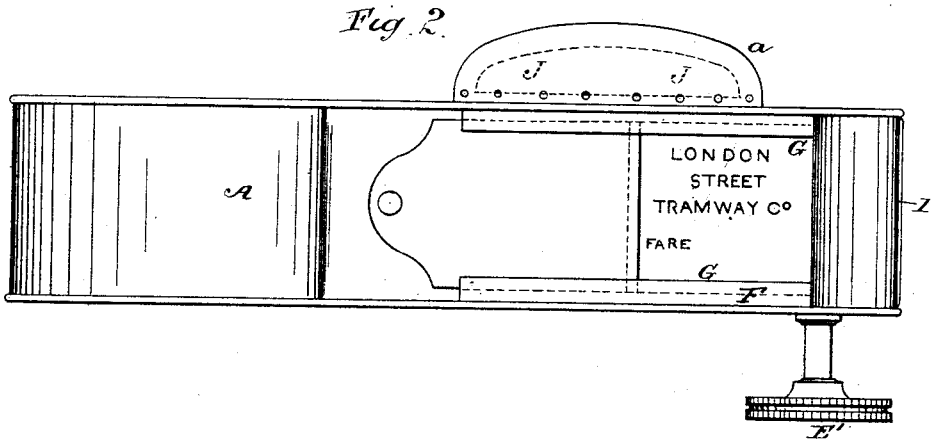


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH HENRY BETTELEY, OF LONDON, ENGLAND.

MACHINE FOR ISSUING AND RECORDING TICKETS.

SPECIFICATION forming part of Letters Patent No. 262,357, dated August 8, 1882.

Application filed December 28, 1881. (No model.) Patented in England October 19, 1880, No. 4,256.

To all whom it may concern:

Be it known that I, JOSEPH HENRY BETTELEY, a subject of the Queen of Great Britain, residing at Fleet street, London, England, have invented an improved method of and apparatus for facilitating hand-marking and the issue of tickets indicating the amounts paid and recording same chemically and simultaneously on a separate strip, (for which I have obtained a patent in Great Britain, No. 4,256, bearing date October 19, 1880,) of which the following is a specification.

My invention relates to that class of registering devices or fare-recorders for recording sales of tickets in which a check or ticket-strip, a record-strip, and transfer-strip are employed and certain devices arranged for moving the ticket and record strips along in juxtaposition to the transfer-strip, and then feeding the ticket-strip out from the casing of the apparatus, and again rolling the record-strip within the casing, whereby after the proper marks have been made upon the ticket-strip and the same transferred to the record-strip from the transfer-strip, a ticket can be torn off and given to the purchaser and a perfect record of such sale retained within the apparatus.

In apparatus of this class an alarm has been arranged to be automatically sounded each time the required length of ticket-strip has been drawn forward, thereby indicating that an entry has been made.

The object of my invention is to improve the construction and organization of parts in an apparatus of such character; and to this end it consists in the features of construction and combination hereinafter described, and illustrated in the annexed drawings, in which—

Figure 1 represents a side view of the mechanism with one side of its inclosing casing removed, and Fig. 2 illustrates a top or plan view of the apparatus with its casing intact.

The letter A indicates the casing that incloses the operative parts of the apparatus. This casing will be constructed so that it can be either closed and locked or unlocked and opened, in order that the person possessing the key may have access to the record-strip from time to time in order to note the sales made by the attendant.

A′ and B indicate spools or reels that are arranged transversely within this casing and parallel to each other, the paper record-strip C being wound upon the lower spool, B, while the ticket-slip D is wound upon the upper spool, A′.

In the upper part of the casing is formed an opening, in which is arranged a plate, F, provided with an opening, G, indicated in Fig. 2, and below this plate is arranged the horizontal plate F′, that is parallel with the plate above it, said lower plate being a portion of a curved plate that is secured within the main casing. The plate F′ is arranged to leave between it and the plate F a space for the ticket and record strips, and also for the transfer-strip *f′*, of carbonized or chemically-prepared fabric or paper, that passes between the strips C and D, and is secured at one end, back of the plate F′, to any suitably-arranged spindle, by means of which, when it becomes worn, it can be fed forward. The ticket-strip can be either plain or printed, and these three strips extend forward transversely to the axis of spools A′ and B, as indicated, whereby space is economized and direct tension had upon the strips from the feed-rollers.

The main casing is provided at its delivery end with an opening, I, through which the ticket-strip can be drawn out, and within the casing at this end are arranged the feed-rollers K and L, between which both the ticket and the record strips are fed by rotating the roller K. This roller K may be provided upon its face with small spikes or pins adapted to pass through the said strips and engage the upper rubber-faced feed-roll, L, so as to turn the same and cause the two strips to be unwound from spools A′ B and fed forward, but, as shown, I have provided one end of the roller K with a pinion, P, engaging a pinion on one end of the roller L, so that the latter is rotated in a positive manner. The axle of the feed-roll K extends out through the main casing, and is provided with a small hand-wheel, E′, by means of which it can be rotated, while upon the same axle, within the casing, is fixed a gear, P, meshing with one of the train of gear, H, M, and N, employed for transmitting motion to the spool or reel E, for receiving the record-strip, one of the said train of gearing

being fixed upon the axis of the receiving-spool E.

J indicates a fixed bell or alarm-gong, arranged within a part, *a*, that is at the side of and forms a portion of the main case A. The hammer J′ of this gong is pivoted to a spider, J^2, within the casing, and at one end it is provided with a short arm, that at each revolution of the gear M will be struck by a pin upon the latter, whereby the hammer will be vibrated and the alarm sounded.

R indicates a spring-plate that is arranged within casing A and provided at its upper end with a bent portion, S, which projects out through the delivery-opening I, and is employed for the purpose of guiding the ticket-strip to said opening.

A pawl, T, that is controlled by a spring, engages the gear H, so as to prevent the back movement of the spool E, and a bar, V, provided with a pin around which the record-strip C passes, serves both as a tension for said strip and also provides means for keeping it away from the upper spool upon which the ticket-strip is wound.

In using this apparatus the operator will mark with a pencil upon the ticket-strip through the opening above it, pressing sufficiently hard to cause an impression to be transferred from the transfer-strip to the record-strip that is below the transfer-strip. He will then turn the feed-roller K by giving the required rotation to the small hand-wheel outside of the casing. The ticket and record strips will be thus fed forward, the former above and the latter below the transfer-strip, until the marked portion of the ticket-strip will be fed out from the casing, after which such portion can be torn off and handed to the purchaser. The record-strip meanwhile is fed forward to the spool E, upon which it is wound, the alarm indicating the movement when the marked portion of the ticket-strip has been drawn out from the case for delivery.

Having thus described my invention, what I claim is—

1. A fare-recorder combining in its structure an inclosing case having an opening in its top and a discharging-mouth at one end for the ticket-strip and two spools arranged transversely within the case and parallel to each other, a fixed plate located beneath said opening in the top of the casing, two paper strips, one for the ticket and the other for the recording strips, respectively, arranged on said spools and extending both in the same direction over said plate, a carbonized or chemically-prepared transfer-strip between said paper strips below the opening in the top of the case, feed-rollers for unwinding the paper strips, and a spool for receiving the recording-strip as it is unwound, substantially as described.

2. The combination, in a fare-recorder, of the inclosing casing A, having an opening through which the ticket-strip is drawn out and an opening through which access is had to the strip for the purpose of working upon it, with the spools A′ and B, upon which the ticket and the record strips are respectively wound, the plate F′, located below the top opening in the casing, the feed-wheels K and L, for feeding forward both strips, the transfer-strip held at one end and passing forward between the paper strips between the top opening in the casing and the said fixed plate and the spool E, for receiving the record-strip, actuated by a train of gearing driven by one of said feed-rolls, substantially as described.

3. The combination, in a fare-recorder, of the main inclosing casing, having an opening through which access is had to the ticket-strip for the purpose of writing upon it, with the spools upon which the ticket and the recording strips are wound, the transfer-slip passing between said strips, the spool E, for receiving the recording-strip, driven by a train of gearing within the main casing from one of the feed-rolls, the bell J and its striking hammer, actuated by a pin upon the gear M, said members all being arranged within the main casing, substantially as described.

4. The combination, with the main casing A, of the ticket and recording strips and the spools upon which they are wound, the plate R, having an upper curved end, S, for guiding the ticket-strip to the discharge-opening I of the main casing, the feed-rolls, transfer-slip, and spool for receiving the second strip as it is unwound, said members being organized substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOSEPH HENRY BETTELEY.

Witnesses:
HENRY GARDNER,
CHARLES ALFRED GROSSETETE.