

(No Model.)

J. I. SABIN.
Electric Annunciator.

No. 232,852.

Patented Oct. 5, 1880.

Fig. 1.

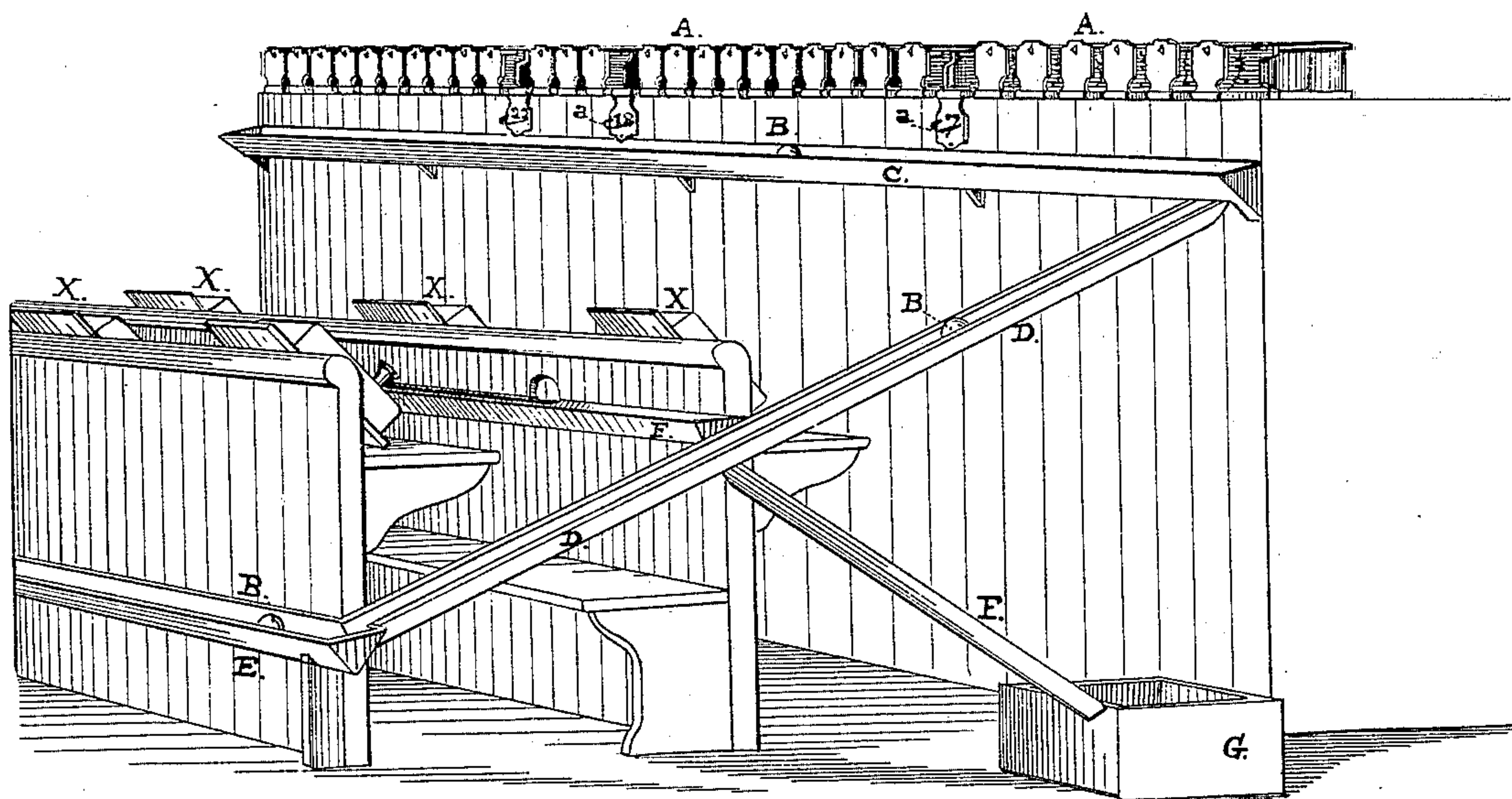


Fig. 2.

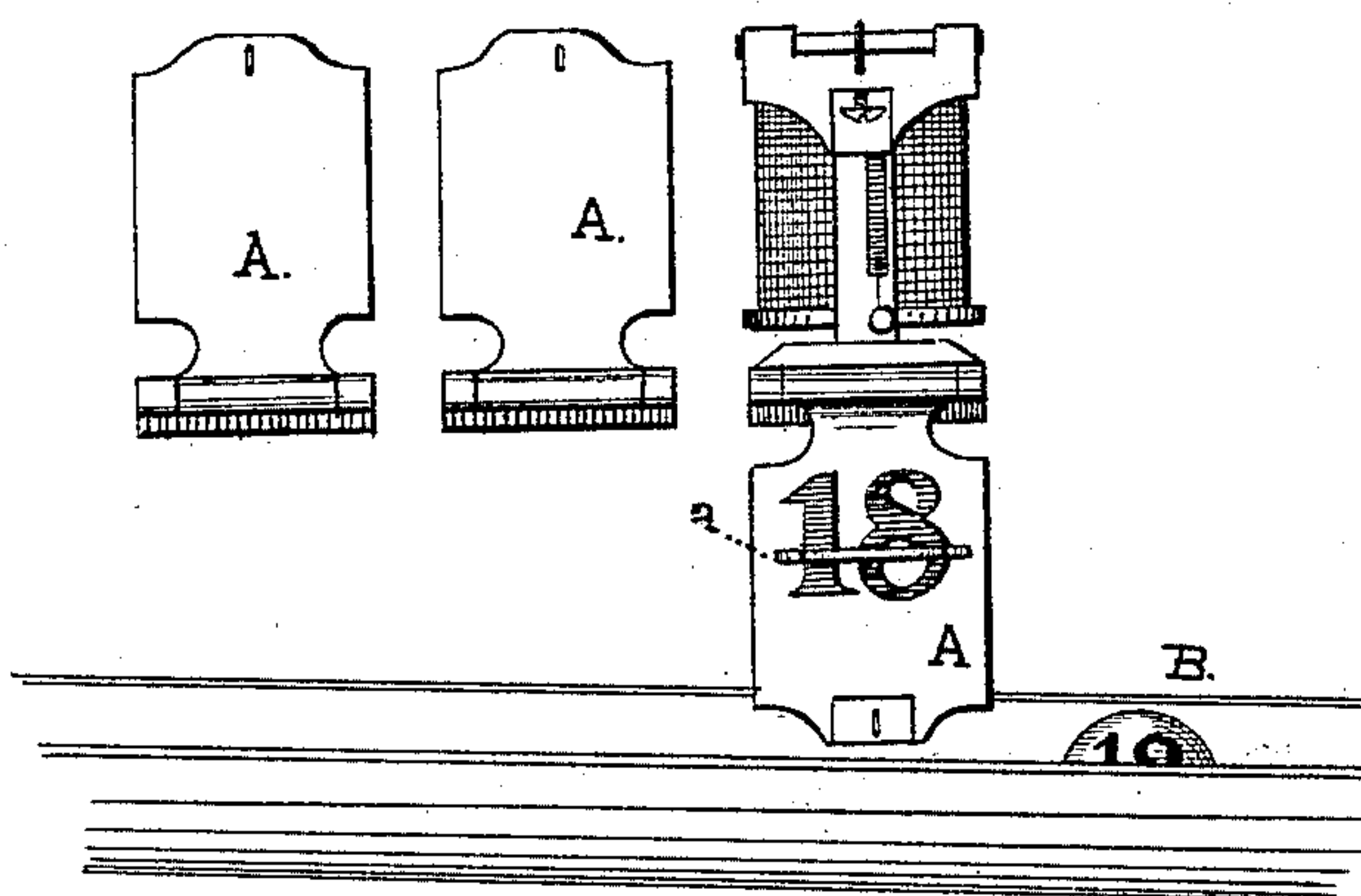
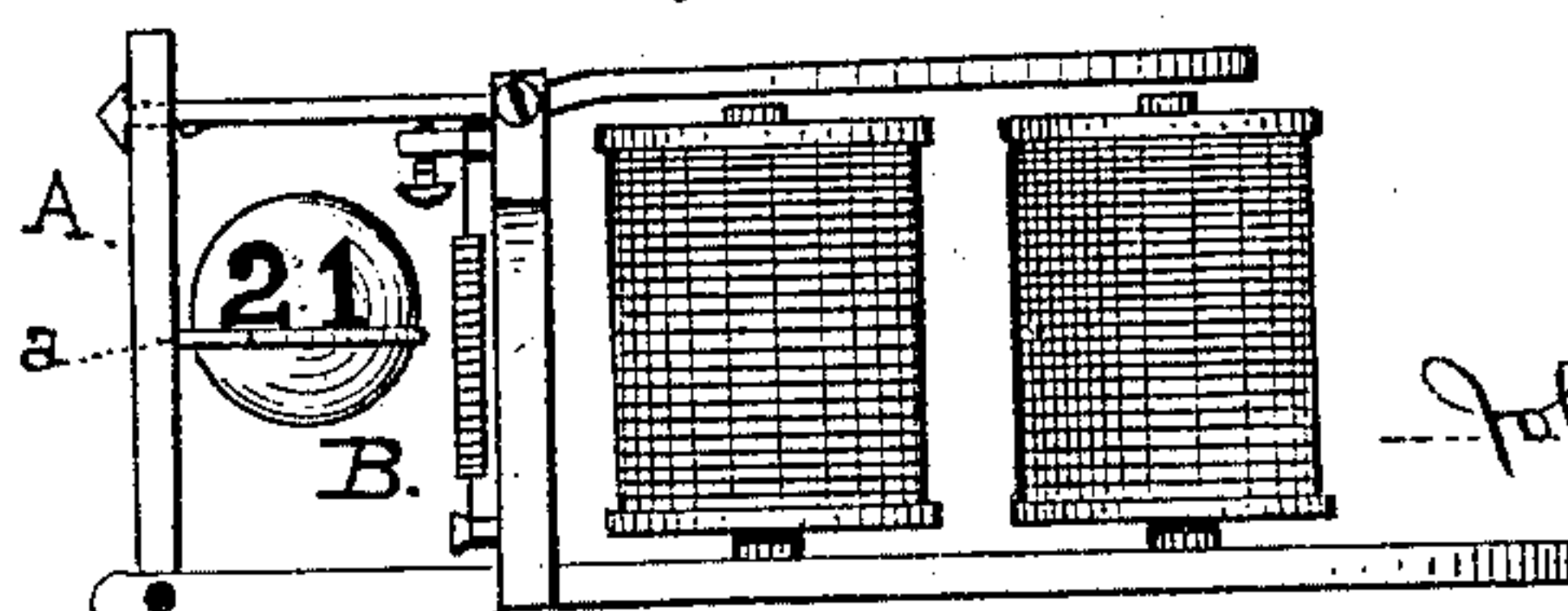


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN I. SABIN, OF SAN FRANCISCO, CALIFORNIA.

ELECTRIC ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 232,852, dated October 5, 1880.

Application filed June 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. SABIN, of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Electric Annunciators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to an improvement in the annunciators employed with telephonic exchange systems.

It consists in the application to and combination with an annunciator of a separable indicator having upon it the number of its annunciator, and adapted to travel or be conveyed and delivered at any required point distant from the operator or attendant at the signal-telephone, whereby as often as the annunciators are brought into action their numbers are automatically communicated to the switch-operators without noise and confusion.

The object of my improvement is to simplify the present system of working the annunciators by dispensing with the boys or clerks now usually employed to call off the numbers as fast as the annunciator-plates are dropped or uncovered, and causing the numbers to be communicated automatically, as will be more fully understood from the following description and the accompanying drawings.

Figure 1 is a diagram illustrating one mode of arranging a set of annunciators in connection with the switch-telephones in a telephone-exchange system. Fig. 2 is a detail view of the annunciator with the detachable traveling indicator. Fig. 3 is a side view of one of these annunciators.

In the present system of indicating the numbers of those subscribers who desire to be connected to others in the system the number on each annunciator-plate is read off by a boy or attendant as fast as the plates are thrown down, and are received and recorded by the boys at the switching-telephone table or communicated to them by an attendant, and in the confusion incident to the operation of a system having a large number of members, where many boys are required, this mode is liable to cause errors and delays in making connections and disconnections between subscribers.

My improvement over the present mode of

operating annunciators consists in causing each annunciator to indicate its number to an operator at any point distant therefrom, and to thereby dispense with the use of the indicator-boys. This I accomplish by arranging and applying with and to the annunciator a detachable indicator having on it the number of its annunciator, and adapted to be separated therefrom and be moved or conveyed and delivered to a point at any required distance from the annunciator. This indicator I construct preferably of a ball or sphere of suitable gravity and with an identifying number or character cut, engraved, or otherwise marked thereon, and I apply and combine it with the annunciator-plate by means of a ring or cage, in which, when the annunciator-plate is closed, this indicator-ball will rest and be held; but when the plate is allowed to drop, as in the present mode of displaying its number, this ball will be dropped out of its cage and be detached therefrom. When thus delivered from the annunciator I cause these balls to be caught and received by suitable inclined troughs, spouts, or conveyers, along and through which they travel, and are carried by their own gravity to the desired point of delivery distant from the annunciator board or station.

In Fig. 1 I have represented several annunciators of a telephonic system of exchanges having my improvement applied thereto. In this the annunciator A is provided on its back face with a ring or cage, *a*, to receive the indicator B, and at a suitable distance beneath the edge of the annunciator is fixed a receiving-trough, C. From this trough are led spouts or conveyers D to a delivery trough or receptacle, E. At this point the indicators B are taken from the receptacle by an attendant and distributed to the operators at the several signal-telephones X X X. The number on the balls and the one read off by the operator then indicate to him the number of the subscriber to be communicated with. After the indicator-balls have been passed to the operator they are placed by him into the return troughs or conveyers F F, whence they are returned and delivered into a receptacle, G, at the annunciators, to be redistributed and replaced in their respective cages *a a* before the annunciators are closed.

Figs. 2 and 3 show clearly the arrangement

and application of my improvement to an annunciator of the ordinary construction.

The indicator bears the respective number of its annunciator, and whenever the plate A is thrown down the indicator B is readily detached and dropped therefrom.

The advantages of my improvement as above described will be evident to any one familiar with the working of telephonic exchanges, and the various ways also in which the same can be applied to the systems now in use will be readily comprehended by those familiar with the construction and arrangement of telegraphic and telephonic lines and exchange systems.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a telephonic annunciator having an indicating number or character, a separable indicator correspondingly numbered or marked, which is adapted to be detached or dropped from the annunciator when the same is uncovered, and to move, travel, or be carried by its own gravity through

and along a conductor or conductors, to be delivered at a point distant from its annunciator, substantially as described, for the purpose set forth.

2. In combination with an annunciator, A, which is provided with a distinguishing mark or character, the cage *a*, the separable indicator B, marked to correspond with the annunciator, and the troughs or conductors and receptacles D E F, or equivalent conveyers and receivers, substantially as described.

3. In combination with a telegraphic or telephonic annunciator system the annunciators whereof are provided with the separable traveling indicators B, the series of conveying and receiving troughs or conductors D E, and the troughs or conductors for returning the indicators back to the annunciator, substantially as described, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

JNO. I. SABIN. [L. S.]

Witnesses:

H. S. BRUNER,
J. H. BARRY.