

No. 764,703.

PATENTED JULY 12, 1904.

S. D. BLACK.  
CARD DISPLAY DEVICE.  
APPLICATION FILED MAR. 29, 1904.

NO MODEL.

Fig. 1.

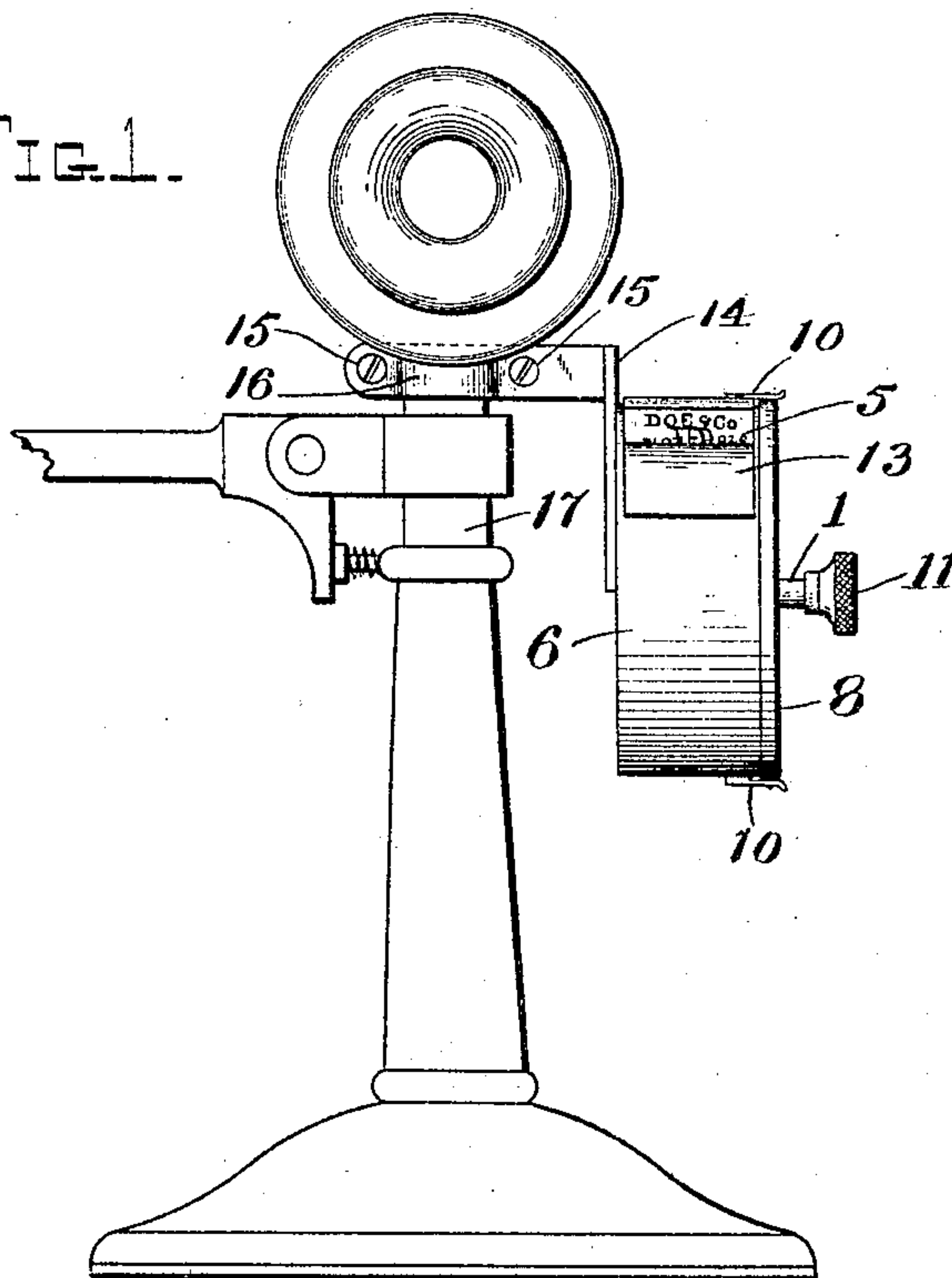


Fig. 2.

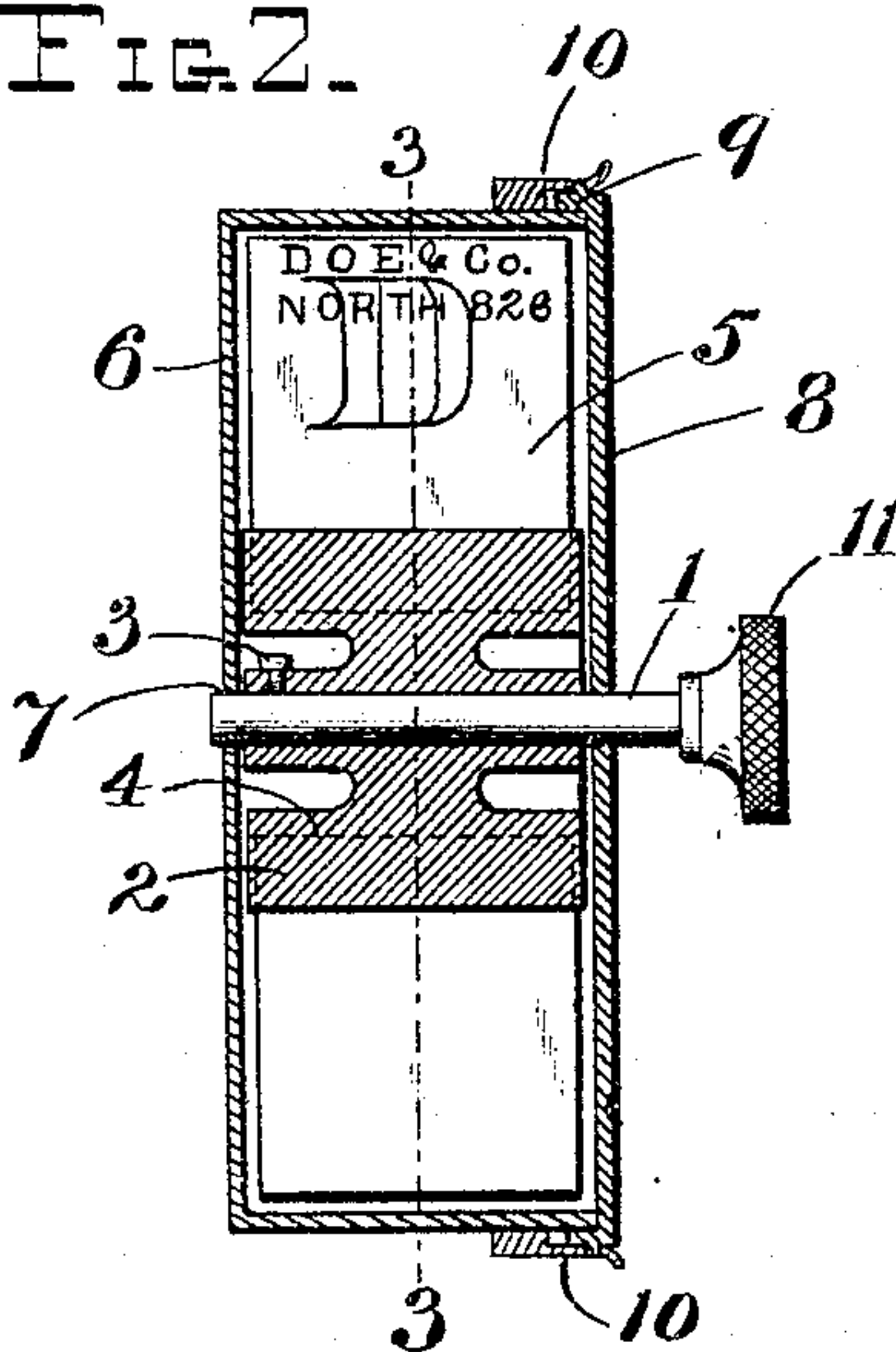
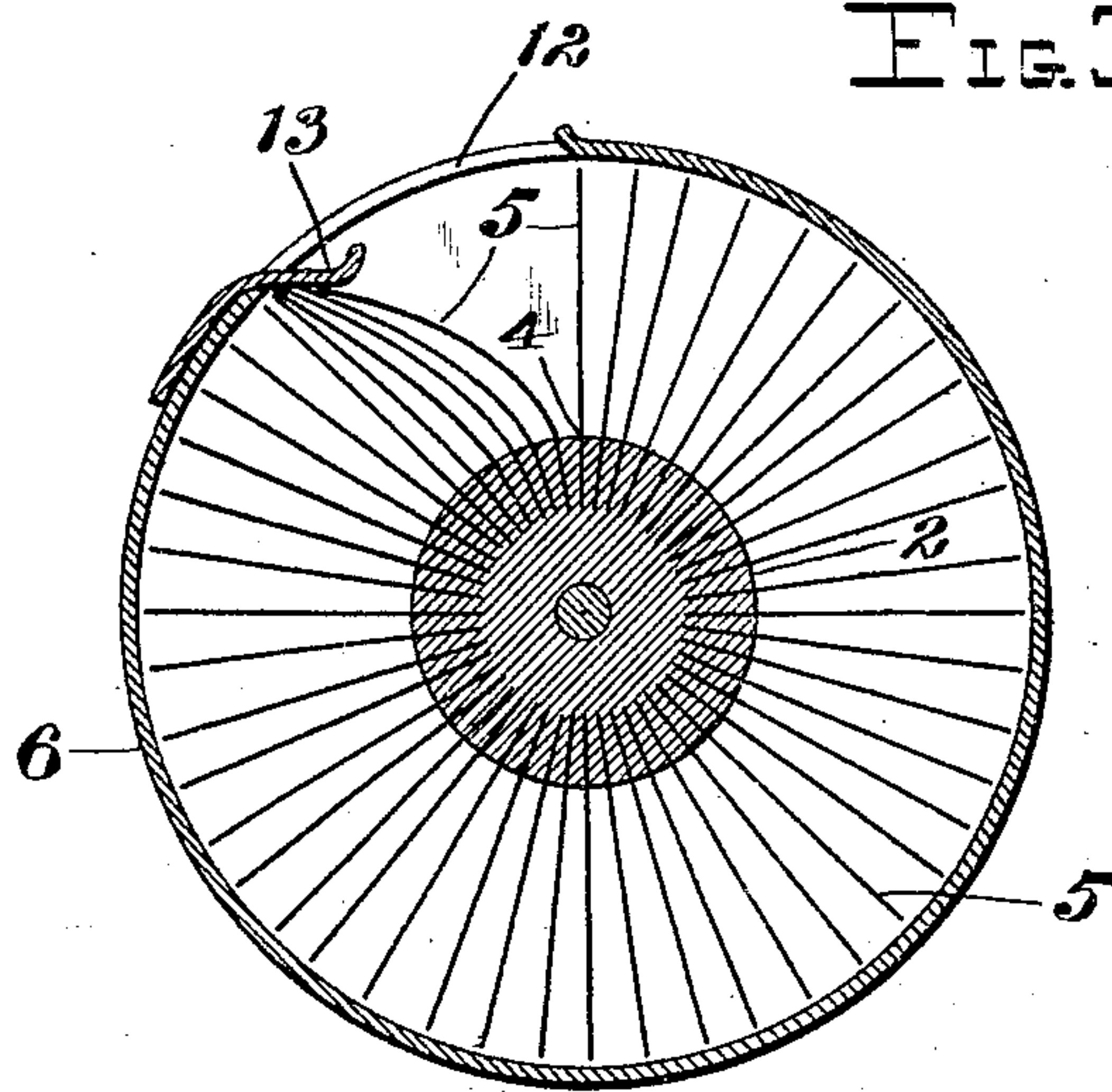


Fig. 3.



Witnesses  
*Howard A. Combs*  
*J. P. Roman*

Inventor  
*S. Duncan Black*  
by *John H. Volk*  
his Attorney



## UNITED STATES PATENT OFFICE.

SAMUEL DUNCAN BLACK, OF BALTIMORE, MARYLAND.

## CARD-DISPLAY DEVICE.

SPECIFICATION forming part of Letters Patent No. 764,703, dated July 12, 1904.

Application filed March 29, 1904. Serial No. 200,538. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL DUNCAN BLACK, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Card-Display Devices, of which the following is a specification.

This invention relates to improvements in card-displaying devices designed especially for use in connection with telephone-call-number lists and card index and cataloguing systems of various kinds; and the object of my invention is the production of a simple and inexpensive device whereby required data may be found with the greatest ease and despatch.

An especially useful application of my invention arises in cases where persons, firms, &c., have a limited number (sometimes a considerable number) of persons, firms, &c., with whom they have to communicate often by telephone. In such a case the names of the parties with whom it is desired to communicate, together with their telephone-numbers, are preferably indexed upon cards, and these cards are so arranged that the card containing the desired name and telephone-number may be found with the greatest possible ease and with the least loss of time. According to this invention, when the telephone-number is once found it may be readily seen, in case the number is forgotten, after the first glance, thereby avoiding the annoyance of having to look up a telephone-number in a book the second time amid repeated calls for the number from the central operator. The invention, however, is not limited to small lists of numbers, as the devices may be made to accommodate a very large number of cards, and therefore a correspondingly large number of telephone-numbers or other data.

With the above objects in view my said invention consists in the combination and arrangement of parts herein described, and more particularly pointed out in the claims.

Referring to the accompanying drawings, which illustrate an embodiment of my said invention, Figure 1 represents the device in elevation, secured to the stand of a telephone transmitter and receiver. Fig. 2 is a central

vertical section of the device detached from a support; and Fig. 3 is a vertical central section of the same, taken along the line 3 3, Fig. 2.

Similar numerals refer to similar parts throughout the several views.

In carrying out the form of my invention shown in the accompanying drawings, I mount upon a suitable spindle 1 a hub or arbor 2, and provide means—such for example, as the screw 3—whereby the said hub may be held fast on said spindle or removed therefrom at pleasure. Around this hub are cut a number of narrow deep slots 4. In each of these slots fits tightly a card 5 of any material upon which data may be inscribed and which will be stiff enough to stand out radially from the hub, substantially as shown. The said slots should be deep enough to hold the ends of the cards rigidly and prevent them from slipping accidentally out, but at the same time admit of the card being readily removed. Upon the cards 5 may be inscribed any desired data. In the case illustrated, in which the invention is designed for use with a telephone-number list, this data consists of the name of the party to be called, together with the telephone-number of such party, and upon each card is printed a large letter corresponding to the initial letter of the name of the party appearing on the card. For example, the firm-name of Doe & Co. and its telephone-number would be inscribed on a card having a large letter "D" thereon. Likewise all other names commencing with the letter "D" will appear on cards having a large letter "D" on them, and names commencing with other letters of the alphabet would appear on cards provided each with a large corresponding letter of the alphabet, the said cards being arranged in alphabetical order, according to the large letters printed thereon. These large letters are preferably printed in red or some other color which will readily attract the eye. The hub 2, with the cards thus mounted thereon, is rotatably supported in a suitable casing 6, which is provided with an opening 7, into which extends one end of the spindle 1. This casing is provided with a removable side 8, having a flange 9, which fits over the side of the cas-



ing, where it is engaged at desired intervals by spring-retaining clips 10, which while holding the removable side in place will admit of its being readily removed at pleasure in order that the hub may be taken out of the casing and one or more cards changed or replaced, if desired. This removable side also forms the other support for the spindle 1, which passes through a central opening therein, as shown. Upon the end of the spindle projecting through the side 8 of the casing is secured a milled nut 11, by which the spindle, hub, and cards are rotated.

At a suitable place in the periphery of the casing 6 is provided an opening 12, into which extends a deflector 13, adapted to impinge on the free ends of the cards and to retard and bend them back as they are brought into engagement with said deflector by the rotation of said hub.

Attached to one side of the casing 6 is a bracket 14, which is secured by means of the screws 15 and split collar 16 to the upper portion of the telephone-stand 17. Obviously the casing may be supported in any other desired manner in proximity to the telephone instrument or other device with which this invention is used.

The operation of the device, as shown, is as follows: Supposing that it is desired to find the number of the telephone of Doe & Co., the user looks into the opening 12 and turns the milled nut rapidly until the cards with the large "D's" thereon come into view. Having come to the large "D's" the nut is then rotated with less rapidity until the name of "Doe & Co." comes into view, when the rotation is stopped. The phone-number of Doe & Co. will appear on the card bearing that firm-name. If the hand is then removed from the nut, the deflector 13 will still mark the place of the card bearing the desired number. The rapidity and ease with which a desired telephone-number may thus be found will at once be apparent. Moreover, if it is desired at any time to replace any of the cards or inscriptions thereon they may be readily removed. All that is necessary in this case is to remove the side 8, when the hub and cards may be lifted out of the casing. The cards may be removed from the hub merely by pulling them out of their slots.

From the foregoing description it will be seen that this invention is capable of many useful applications. For example, it may be used as a card-index for filing systems of various kinds, and when thus used several devices may be combined and each used as a unit—that is, one device may contain all of the names coming under one letter of the alphabet, another device all names coming under another letter, and so on through the alphabet. Moreover, there are many obvious mechanical changes which may be made in the

construction of the device without departing from the spirit of the invention; but

What I claim as my invention is—

1. In a device of the character described, the combination with a supporting member, of a plurality of index-cards arranged in a row one behind the other and each secured at one end rigidly to said supporting member, a deflector extending into the path of the free ends of said cards and adapted and arranged to be brought into engagement with said free ends to bend said cards back one from the other, for the purposes specified.

2. In a device of the character described, the combination with a supporting member, of a plurality of index-cards each bearing a large index character and data appropriately arranged thereunder, said cards arranged in a row one behind the other and each secured at one end rigidly to said supporting member, a deflector extending into the path of the free ends of said cards and adapted and arranged to be brought into engagement with said free ends to bend said cards back one from the other, for the purposes specified.

3. In a device of the character described, the combination with a supporting member, of a plurality of index-cards each bearing a large index character and a telephone-subscriber's name and number, said cards arranged in a row one behind the other and each secured at one end rigidly to said supporting member, a deflector extending into the path of the free ends of said cards and adapted and arranged to be brought into engagement with said free ends to bend said cards back one from the other, for the purposes specified.

4. In a device of the character described, the combination with a movable supporting member, of a plurality of index-cards arranged in a row one behind the other and each secured at one end rigidly to said supporting member, a stationary deflector extending into the path of the free ends of said cards and adapted to retard the movement of the free ends of said cards as the said cards are brought into engagement with said deflector by the movement of said movable-card-supporting member and to thus bend said cards back one from the other for the purposes herein specified.

5. In a device of the character described, the combination with a rotatable hub, of a plurality of index-cards arranged in a row one behind the other around the periphery of said hub and each secured at one end rigidly to said hub, a stationary deflector extending into the path of the free ends of said cards and adapted to retard the movement of the free ends of said cards as the same are brought into engagement with said deflector by the rotation of said hub and thus to bend said cards back one from the other, for the purposes herein described.

6. In a device of the character described, the combination with a casing provided with a dis-



play-opening, a hub rotatably mounted in said casing, a plurality of index-cards arranged around the periphery of said hub in a row one behind the other and each secured at one end rigidly to said hub, a deflector extending into said opening and into the path of the free ends of said cards and adapted to retard the said free ends of said cards as the same are brought into contact with said deflector by the rotation of said hub and to thus bend said cards back one from the other and display one face of each card as they are brought successively in front of said opening, substantially as described.

7. In a device of the character described, the combination with a casing having a display-opening and a removable side, a spindle journaled in said casing and extending through the side thereof, a hub mounted upon said spindle, a milled nut secured to one end of said spindle on the outside of said casing for the purpose of rotating said hub, a plurality of index-cards arranged around the periphery of said hub in a row one behind the other and each secured at one end rigidly to said hub, a deflector extending into said opening and into the path of the free ends of said cards and adapted to retard the said free ends of said cards as the same are brought into contact with said deflector by the rotation of said hub and to thus bend said cards back one from the other and display one face of each card as they are brought successively in front of said opening, substantially as described.

8. A rotary telephone-directory, comprising a casing provided with a display-opening and a removable side, a spindle journaled in said casing and extending therethrough, a hub mounted on said spindle, a milled nut mounted on one end of said spindle outside of said casing for the purpose of rotating said hub, a plurality of index-cards each bearing a large index character and a telephone-subscriber's name and number, said cards being arranged radially around said hub one behind the other and each removably and rigidly secured at one end to said hub, a stationary deflector located in proximity to the display-opening in said casing and adapted to retard the free ends of said cards as the same are brought

into contact with said deflector by the rotation of said hub and to thus bend said cards back one from the other and display one face of each card as they are brought successively in front of said opening, substantially as described.

9. In a device of the character described, the combination with a rotatable hub provided with a plurality of radiating slots, of a plurality of index-cards one card of each being made fast in each of said slots, said cards being arranged one behind the other around the periphery of said hub, a stationary deflector extending into the path of the free ends of said cards and adapted to retard the movement of the free ends of said cards as the same are brought into engagement with said deflector by the rotation of said hub and thus to bend said cards back one from the other, for the purposes herein described.

10. A rotary telephone-directory, comprising a casing provided with a display-opening and a removable side, a spindle journaled in said casing and extending therethrough, a hub mounted on said spindle, a milled nut mounted on one end of said spindle outside of said casing for the purpose of rotating said hub, a plurality of index-cards each bearing a large index character and a telephone-subscriber's name and number, said cards being arranged radially around said hub one behind the other and each removably and rigidly secured at one end to said hub, a stationary deflector located in proximity to the display-opening in said casing and adapted to retard the free ends of said cards as the same are brought into contact with said deflector by the rotation of said hub and to thus bend said cards back one from the other and display one face of each card as they are brought successively in front of said opening, and a supporting-bracket secured to said casing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

S. DUNCAN BLACK.

Witnesses:

NANNIE R. BLACK,

WALTER A. HOUGHTALING.