Nov. 18, 1924. 1,516,119

F. J. ROONEY

FINGERPRINT MACHINE

Filed Oct. 30, 1922 2 Sheets-Sheet 1

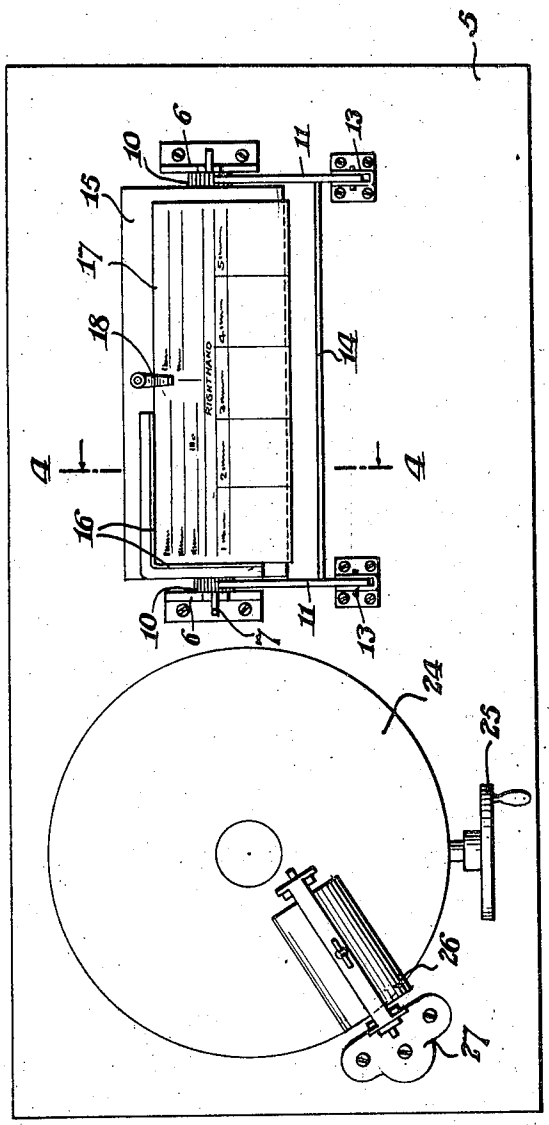

Fig. 1.

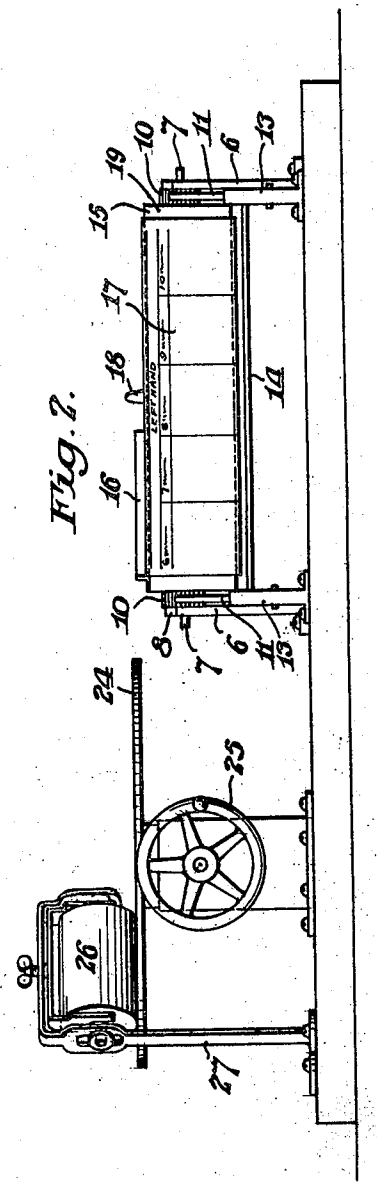

Fig. 2.

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Fig. 3.

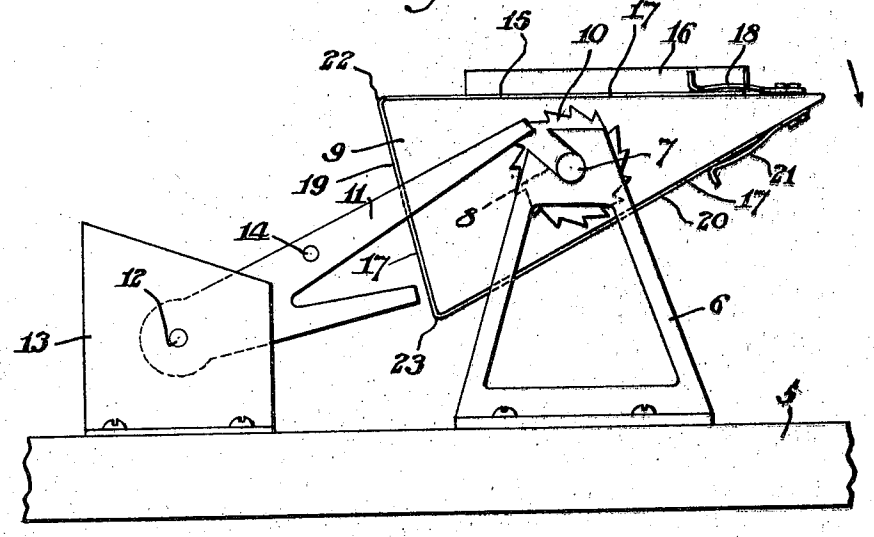
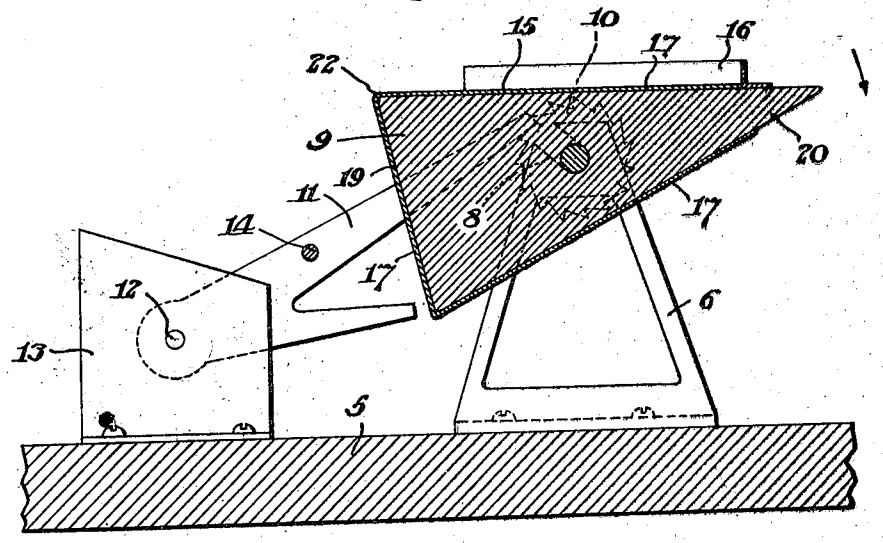


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANCIS J. ROONEY, OF PHILADELPHIA, PENNSYLVANIA.

FINGERPRINT MACHINE.

Application filed October 30, 1922. Serial No. 597,819.

To all whom it may concern:

Be it known that I, FRANCIS J. ROONEY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fingerprint Machines, of which the following is a specification.

My invention relates to finger print machines, that is to say, to apparatus adapted to facilitate the making of finger print records for identification purposes.

The object of my invention is to provide a simple and efficient device for conveniently making impressions of the finger tips which is so constructed and arranged as to greatly facilitate the various operations necessary in making the prints.

In the making of finger print records, it is customary to take the separate impressions of each of the digits of each hand, and also to take the impressions of the four fingers of each hand simultaneously. It is well known to those skilled in the art of taking finger print impressions that, by reason of the rolling motion required, the best results can be obtained by taking the impressions of the separate digits near the lower edge of the support upon which the record or chart is positioned during the operation. It is also understood by those skilled in the art that it is preferable to have the entire record of the separate impressions of each of the digits, and the simultaneous impressions of the four fingers of each hand, all on one face of the record for the purpose of study and classification of the same.

My invention, therefore, contemplates the provision of a machine in which each portion of the sheet or record on which the impression is taken is so mounted as to present a convenient working edge. My invention further contemplates improved means for mounting the sheet and for manipulating the same during the successive steps required in making the complete record.

The nature and characteristic features of my invention will be more readily understood from the following description, taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1 is a top or plan view of a finger print machine embodying the main features of my present invention;

Fig. 2 is a side elevation thereof;

Fig. 3 is an end elevational view, enlarged, of the impression platen and its associated parts; and

Fig. 4 is an enlarged cross-sectional view thereof, taken approximately on the line 4—4 of Fig. 1.

Referring to the drawings, in the particular embodiment of my invention therein shown, 5 is a base upon which the various parts of the machine are mounted. Secured to the base 5 are standards 6, in the top portions of which a shaft 7 is journalled. One of the standards 6 has the journal portion slotted, as at 8, to permit the removal of the shaft and the parts mounted thereon from the standards 6, if desired.

The shaft 7 carries a platen 9 secured thereto and mounted between the standards 6. The platen 9 is polygonal in cross-section, the same being preferably in the shape of an isosceles triangle, as clearly shown in Figs. 3 and 4 of the drawings, although it will be readily understood that if records of different arrangements of the impression spaces are to be used, the cross-section of the platen 9 may be modified accordingly, as will hereafter be more clearly understood.

At each end of the platen 9 there is also secured to the shaft 7 a toothed wheel 10. Each of the toothed wheels 10 is engaged by a pawl or detent 11. Each of the pawls or detents 11 is pivoted, as at 12, to a standard 13 which is secured to the base 5. The pawls 11 are connected to each other by means of a transversely extending rod 14, so that both the pawls 11 may be simultaneously raised out of engagement with the toothed wheel 10 if desired.

Upon one face 15 of the platen 9 there is secured an alining member 16, comprising a pair of angle members secured to the face 15 of the platen 9 near the top and left hand edges thereof respectively, and projecting upwardly from the face 15 of the platen 9. The purpose of the member 16 is to properly position the record or chart 17 upon the surfaces of the platen 9. Upon the face 15 of the platen 9 there is also secured a spring member 18, which is adapted

to clamp the upper end of the record or chart 17 to the surface 15 of the platen 9. As shown, the surface 15 of the platen 9 is provided for taking the impressions of the separate fingers of the right hand, the surface 19 of the platen 9 is provided for taking the impressions of the separate fingers of the left hand, and the surface 20 of the platen 9 is provided for taking the simultaneous impressions of the four fingers of each hand. Mounted on the surface 20 of the platen 9 is a spring member 21, which is adapted to receive and hold the lower portion of the record or chart 17.

The record or chart 17 is so laid out that the lower portion of the field for receiving the impressions of the separate fingers of the right hand will coincide with the edge 22 of the platen 9, between the surfaces 15 and 19 thereof; and the lower portion of the field for receiving the impressions of the separate fingers of the left hand will coincide with the edge 23 of the platen 9, between the surfaces 19 and 20 thereof.

Mounted adjacent the platen 9 and its associated parts is a horizontally arranged inking disk 24, adapted to be rotated by means of a handle 25 and intervening mechanism not shown, and a roller 26 supported by a suitable bracket 27 serves to spread the ink upon the disk 24 when the same is rotated. However, the particular construction and arrangement of the inking device thus briefly referred to constitutes no part of the present invention, said inking device being shown and described in a companion application for Letters Patent, intended to be filed herewith.

The operation of the machine of the present invention may now be described. The record sheet is mounted upon the platen 9, the upper portion thereof being gripped by the spring member 18 and the sheet properly positioned by means of the alining device 16 mounted upon the surface 15 of the platen. The sheet is then wrapped around the platen and the lower portion thereof pushed under and gripped by the spring 21 which is mounted upon the surface 20 of the platen. As before indicated, the record is so laid out that the lower margin of the field for taking the impressions of the separate digits of the right hand will coincide with the edge 22 of the platen, and the lower margin of the field for taking the impressions of the separate digits of the left hand will coincide with the edge 23 of the platen. It will therefore be seen that the surface 15 of the platen provides a support for taking the impressions of the separate digits of the right hand, the field of the chart or record for receiving the same being arranged near the lower edge 22 thereof, so that the digits may be properly rolled or otherwise manipulated in making the records. Likewise the surface 19 of the platen provides a similar support for taking the impressions of the separate digits of the left hand, having the field of the chart or record arranged near the lower edge 23 thereof. In making the simultaneous impressions of the four fingers of each hand, the surface 20 of the platen 9 is used, but in this instance it will be readily understood that it is not necessary to have the field arranged adjacent the lower edge of the support, as the rolling action or manipulation is not required in making the simultaneous impressions of the four fingers of each hand.

The chart being mounted on the platen as aforesaid, the platen is turned to bring the surface 15 thereof to the most convenient position for making the necessary manipulations of the digits thereon, after the same have been inked on the inking disk 24 which is located adjacent the platen and its associated mechanism. The toothed wheels 10 and their co-operating pawls 11 will serve to steady the platen in the desired position during the taking of the impressions, yet will permit the same to be rotated when desired, that is, after the impressions of the separate digits of the right hand have been taken. The platen will then be turned to the most convenient position to enable the same operation to be performed with respect to the separate digits of the left hand, and subsequently the platen may again be rotated to permit the surface 20 to be brought to the proper position to take the simultaneous impressions of the four fingers of each hand.

Having thus described the nature and characteristic features of my present invention, what I claim as new and desire to secure by Letters Patent is:

1. In a finger print machine, a platen of polygonal cross section, said platen being adapted to have a record sheet mounted thereon by wrapping the same about the several faces thereof, means for rotatably supporting said platen whereby a plurality of impression fields of said chart may be successively presented by rotating said platen and without shifting said chart with respect thereto, and the marginal edge of the working surface of the platen being unobstructed whereby the fingers of which the impressions are being taken may be properly manipulated upon the respective impression fields adjacent the marginal edges thereof.

2. In a finger print machine, a platen of polygonal cross section, said platen being adapted to have a record sheet mounted thereon by wrapping the same about the several faces thereof, means for rotatably supporting said platen whereby a plurality of impression fields of said chart may be successively presented by rotating said platen and without shifting said chart with re-

spect thereto, the marginal edge of the working surface of the platen being unobstructed whereby the fingers of which the impressions are being taken may be properly manipulated upon the respective impression fields adjacent the marginal edges thereof, and means mounted on one only of the surfaces of said platen adapted to position said record sheet.

3. In a finger print machine, a platen of polygonal cross section, said platen being adapted to have a record sheet mounted thereon by wrapping the same about the several faces thereof, means for rotatably supporting said platen whereby a plurality of impression fields of said chart may be successively presented by rotating said platen and without shifting said chart with respect thereto, the marginal edge of the working surface of the platen being unobstructed whereby the fingers of which the impressions are being taken may be properly manipulated upon the respective impression fields adjacent the marginal edges thereof, means mounted on one of the surfaces of said platen adapted to position said record sheet, and means for clamping said record sheet.

4. In a finger print machine, a platen of polygonal cross section, said platen being adapted to have a record sheet mounted thereon by wrapping the same about the several faces thereof, means for rotatably supporting said platen whereby a plurality of impression fields of said chart may be successively presented by rotating said platen and without shifting said chart with respect thereto, the marginal edge of the working surface of the platen being unobstructed whereby the fingers of which the impressions are being taken may be properly manipulated upon the respective impression fields adjacent the marginal edges thereof, means mounted on one of the surfaces of said platen adapted to position said record sheet, means for clamping said record sheet, and means for maintaining said platen in desired positions.

5. In a finger print machine, a platen of polygonal cross section, said platen being adapted to have a record sheet mounted thereon by wrapping the same about the several faces thereof, means for rotatably supporting said platen whereby a plurality of impression fields of said chart may be successively presented by rotating said platen and without shifting said chart with respect thereto, the marginal edge of the working surface of the platen being unobstructed whereby the fingers of which the impressions are being taken may be properly manipulated upon the respective impression fields adjacent the marginal edges thereof, means mounted on one of the surfaces of said platen adapted to position said record sheet, means for clamping said record sheet, toothed wheels fixedly associated with said platen, and pawls adapted to engage said toothed wheels.

In testimony whereof, I have hereunto signed my name.

FRANCIS J. ROONEY.