Sept. 12, 1939. T. H. COX 2,172,904

FINGERPRINTING APPARATUS

Filed March 25, 1938

FIG. 3.

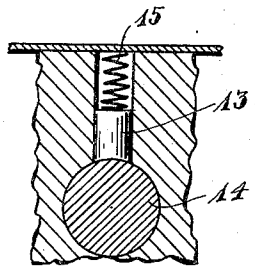


FIG. 1.

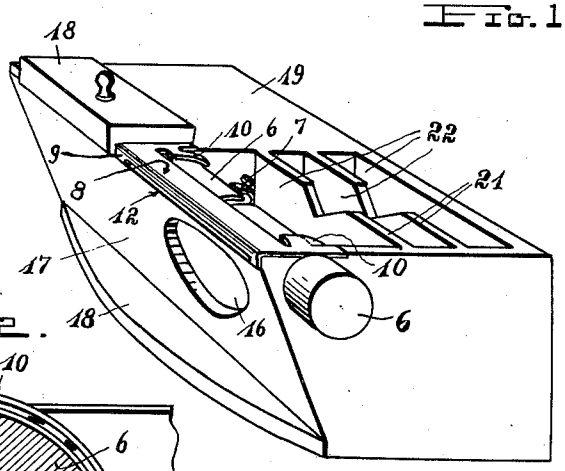


FIG. 2.

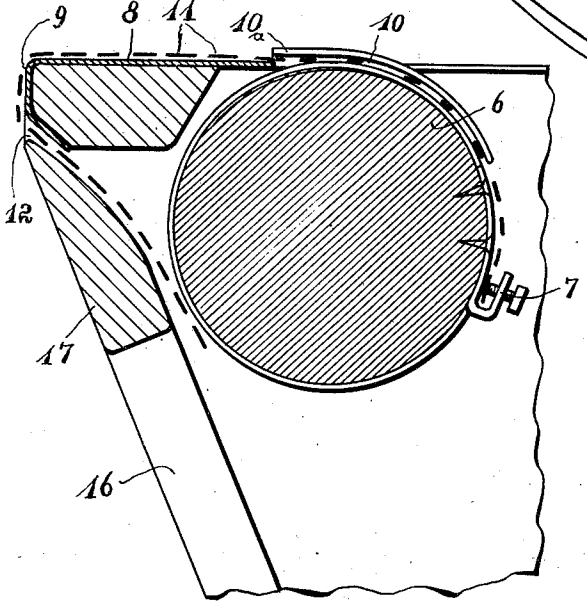


FIG. 4.

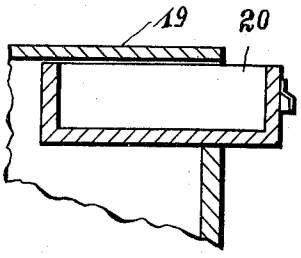
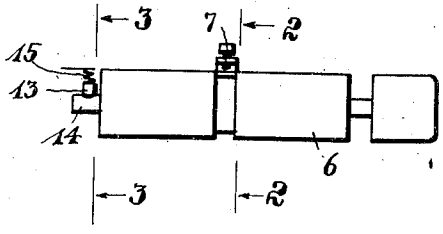


FIG. 5.



THOMAS H. COX,

INVENTOR.

BY Otho H. Kruger,

HIS ATTORNEY.

Patented Sept. 12, 1939

2,172,904

UNITED STATES PATENT OFFICE

2,172,904

FINGERPRINTING APPARATUS

Thomas H. Cox, Los Angeles, Calif.

Application March 25, 1938, Serial No. 198,079

5 Claims. (Cl. 41—4)

This invention relates to devices designed to hold the form-blanks while individuals produce fingerprints on such blanks.

One of the objects of this invention is to provide an apparatus designed to hold form blanks so that fingerprints can be applied more efficiently.

Another object is to provide means whereby the blanks can be moved quickly to the different positions required for the different fingerprints.

Another object is to provide means whereby the blank is held firmly within the apparatus for progressive movements to the different positions.

Another object is to provide means whereby the blank is held desirably flat while progressively moved from one end to the other end through the apparatus.

Another object is to provide means whereby the blank is held against undesired movements.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

Fig. 1 is a perspective view of the whole fingerprinting apparatus, with a protecting cover over the inking plate.

Fig. 2 is a fragmentary vertical cross-section through the apparatus at a point of about the middle of the roller, a heavy dash-line indicating the approximate position that an inserted form-blank would take while passed through the apparatus.

Fig. 3 is a fragmentary vertical cross-section through a pin portion of the roller and a friction member for retarding the movements of the roller.

Fig. 4 is a fragmentary vertical cross-section through the housing and a supply-drawer.

Fig. 5 is a detail side elevation of the roller with blank clamp, and the friction indicated in its preferred position.

It should be kept in mind that blank-forms for fingerprinting are generally clamped to the edge of a table while fingerprints are applied, requiring a releasing of the blanks and shifting to advanced positions in order that the different fingerprints may be applied in the different spaces provided therefor in the blanks.

With this apparatus, a blank is clamped to the roller 6 by the clamping means 7 so as to facilitate a progressive shifting of the blank without being detached until all fingerprints are procured.

Various means are provided to accomplish this object in a desired manner.

In the first place, a suitably hard and smooth base must be provided upon which the form-blank can be held so that most desirable perfect fingerprints can be procured on the supported blank.

A metal plate, or sheet, 8, with a polished surface is provided in suitable relation to the front edge 9 of the apparatus and of the roller 6, so that any form-blank passed over this surface will have a desirable solid and smooth support.

While the clamping means 7 holds the center of the front edge of an inserted blank, the end-edges of the blank are inserted in guides 10, about the ends of the roller 6, in such a manner that an inserted blank will take approximately the position indicated by the heavy dash-line 11 in Fig. 2.

A slot 12 is provided in the front edge 9 of the apparatus into which a blank is inserted, rear-edge first, preparatory to inserting the end-edges into the guides 10 and fastening the front-edge in the means 7.

The slot 12 and the whole arrangement is preferably so that an inserted blank is frictionally retarded suitably to thereby produce a tightening effect upon the blank as soon as the roller is being rotated, with the blank attached to the means 7.

Once advanced to the first desired fingerprinting position with respect to the spaces provided on the blank, the inserted blank is retained thus suitably tightened by reason of the fact that the roller is also frictionally retained, this being by a friction-member 13, riding on the periphery of the pin 14 of the roller 6, as illustrated in Figs. 3 and 5, under the tension of the spring 15.

By the time that the inserted blank leaves the slot 12, the straight portions of the guiding means 10 serve to hold the rearmost part of the blank flat on the plate 8.

After completion of the fingerprinting operations, the blank is released from the clamping means 7, for which purpose a suitably large opening 16 is provided in the front wall 17 of the apparatus.

The filled-in blank-form may then easily be withdrawn from the guides 10 to be filed in the records.

Using a smoothly polished plate 8 at the printing end, this may also be extended to the inking end, though this does not prevent the use of the commonly preferred glass inking plate.

Since fingerprinting is not always continuous, though often frequently enough that ink may be used for subsequent cases, a removable cover

18 is provided to protect surplus ink that may have been spread on the inking plate.

The front wall 17 of the apparatus is preferably arranged in an inclined manner as indicated, for the purpose of making it more convenient for a person to place certain of the fingers properly on the top while the remaining portion of the hand is held partly under the top, or against the inclined front wall.

To prevent any overbalancing of the apparatus, the bottom wall is extended as indicated at 18 for bracing the apparatus when pressure is applied to the overlapping top.

The closed top portion of the apparatus at 19 may cover drawers that may hold needed supplies, such a drawer being indicated at 20 in Fig. 4.

The open section of the apparatus, behind the roller 6, is provided with partitions 21, providing compartments 22 for blank-forms as well as for storing completed records temporarily while the fingerprinting is going on.

Having thus described my invention, I claim:

1. In a fingerprinting apparatus, a front wall having a slot into which a blank form can be inserted frictionally, a smooth-surfaced fingerprinting plate above the slot, a roller back of the plate and having means for attaching the front edge of an inserted blank so that the blank may be drawn thereby from the slot over the plate, guiding means about the ends of the roller for engaging the end-edges of the inserted blank having straight portions for holding the blank flat and in contact with the plate after the blank has left the slot, and means in the apparatus for frictionally retaining the roller in advanced position against the tension of the blank while held in the slot.

2. In a fingerprinting apparatus, a structure composed of walls supporting a smooth-surfaced fingerprinting plate near the top front edge, a roller having reduced pin-portions turnably mounted in certain of the walls so as to bring the cylindrical periphery of the roller on a level with the smooth surface of the fingerprinting plate, means for actuating a recording card over said plate by means of the roller, and a friction-member movably mounted in a certain wall under tension of a spring and riding on said pin-portion of the roller for holding the roller in certain advanced and adjusted positions.

3. In a fingerprinting apparatus, a structure composed of walls supporting a smooth-surfaced fingerprinting plate near the top front edge of the structure, and a roller having a securing means on its periphery for engaging the edge of a fingerprint recording card and being of a diameter to draw the card over the plate in less than a turn so as to avoid overlapping of the card and bulging by the securing means.

4. In a fingerprinting apparatus, a structure composed of walls supporting a smooth-surfaced fingerprinting plate near the top front edge of the structure, a roller mounted to operate endwise between walls of the structure and with the longitudinal axis of the roller parallel to and rearwardly of the plate having a securing means on its periphery for engaging the forward edge of any inserted fingerprint recording card and being of a diameter to bring the rearmost edge of the card to a point short of the securing means when wound upon the roller.

5. In a fingerprinting apparatus, a structure composed of walls supporting a smooth-surfaced fingerprinting plate near the top front edge of the structure, a roller mounted to operate endwise between walls of the structure and with the longitudinal axis of the roller parallel to and rearwardly of the plate and having securing means on its periphery for engaging the forward edge of any inserted fingerprint recording card and being of a diameter to bring the rearmost edge of the card to a point short of the securing means when wound upon the roller, and card-guiding means projecting from the walls over the end-edges of the roller with intake portions in a position to receive the card when shifted over the plate rearwardly towards the roller.

THOMAS H. COX.