

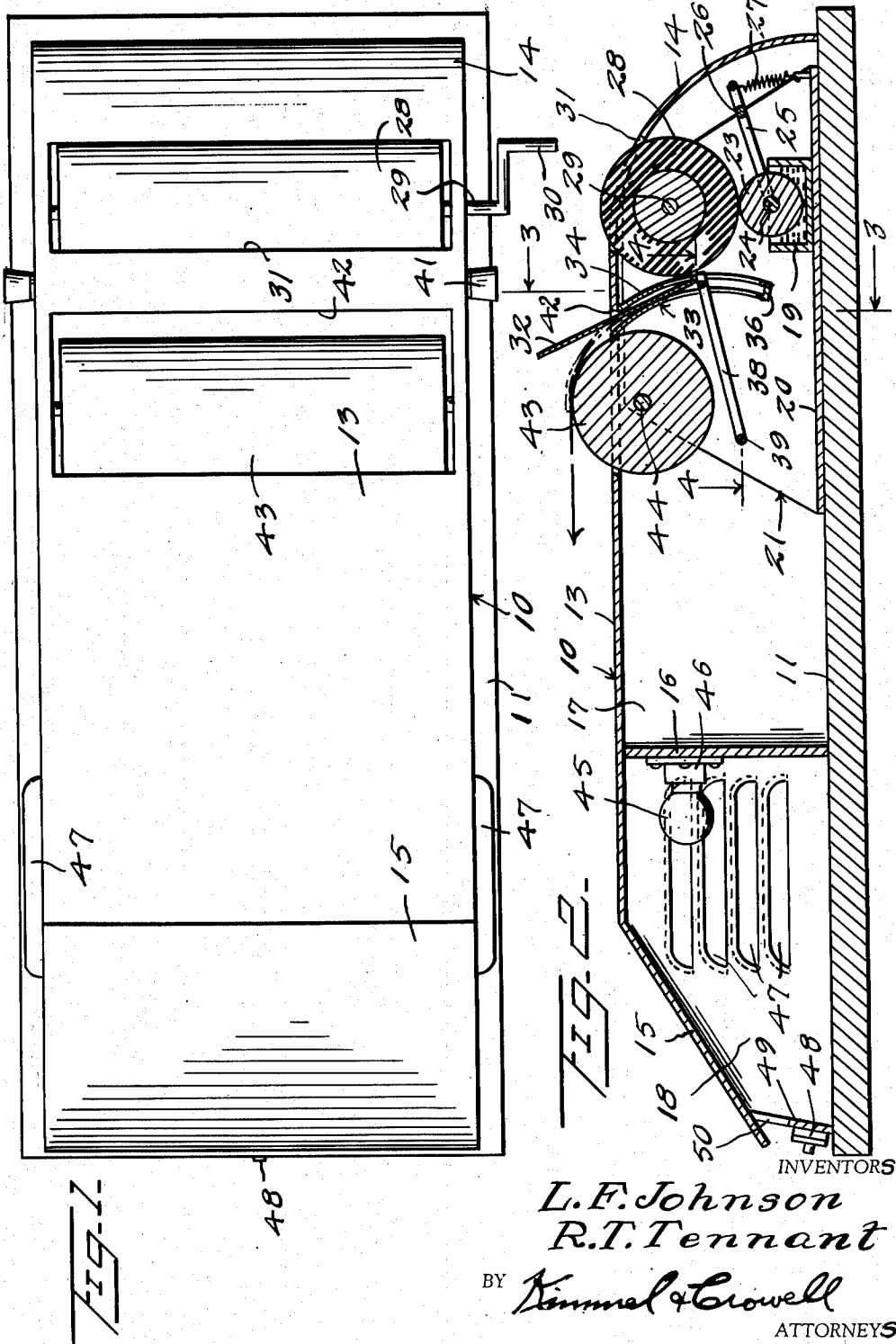
Feb. 24, 1953

L. F. JOHNSON ET AL  
FINGERPRINTING MACHINE

2,629,194

Filed Nov. 15, 1950

2 SHEETS—SHEET 1



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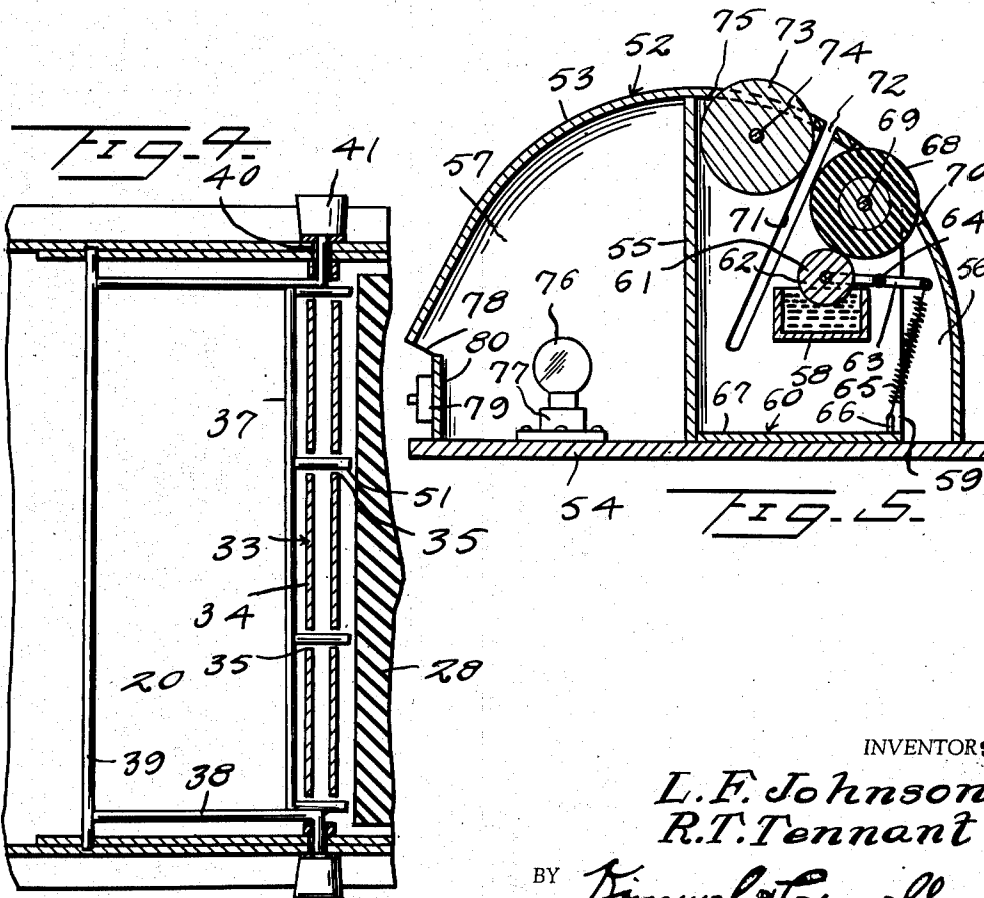
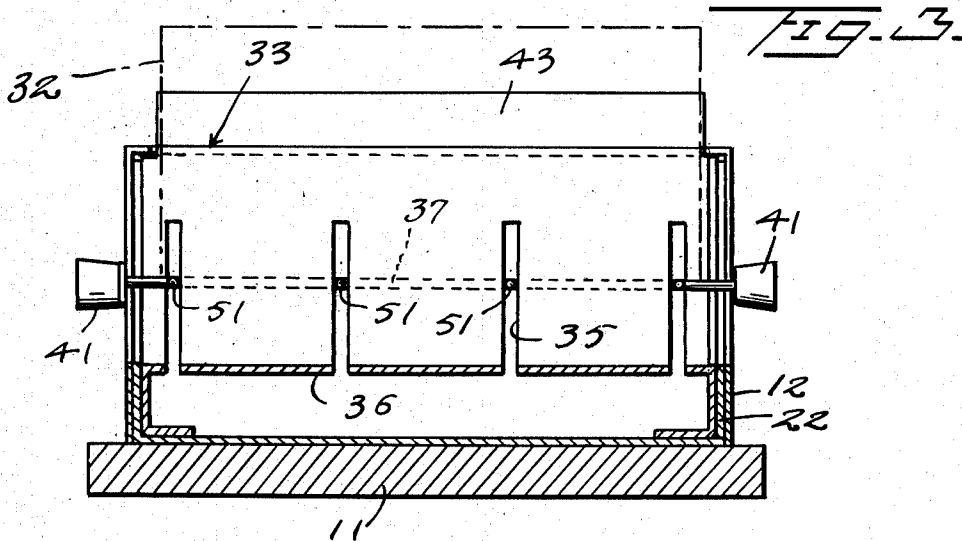
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## UNITED STATES PATENT OFFICE

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## FINGERPRINTING MACHINE

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6 Claims. (Cl. 41-4)

1

This invention relates to a fingerprinting machine.

An object of this invention is to provide a machine which is designed for use in banks or other money handling institutions which will permit the impressing of fingerprints on checks, notes or other documents for identification purposes.

Another object of this invention is to provide a fingerprinting machine which includes means whereby the quality of the fingerprint may be quickly determined.

A further object of this invention is to provide a fingerprinting machine which is of simple construction and can be used with various types or kinds of ink, including invisible ink.

A further object of this invention is to provide a machine of this kind which includes means for adjusting the document holder so that documents of different sizes may be used with the machine.

With the above and other objects in view, our invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a plan view of a fingerprinting machine constructed according to an embodiment of this invention.

Figure 2 is a longitudinal section of the machine.

Figure 3 is a sectional view taken on the line 3-3 of Figure 2.

Figure 4 is a fragmentary sectional view taken on the line 4-4 of Figure 2.

Figure 5 is a longitudinal section of a modified form of this invention.

Referring to the drawings, and, first, to Figure 1 to 4, inclusive, the numeral 10 designates generally a housing which is formed of a base 11, opposite side walls 12, a top wall 13, a downwardly curved front wall 14, and a downwardly inclined rear wall 15. An intermediate wall or partition 16 is disposed between the side and top walls and the bottom wall thereby dividing the housing into a pair of compartments 17 and 18, respectively. The compartment 17 is the forward inking compartment and has mounted therein an ink well or reservoir 19 which is disposed on the bottom 20 of a substantially U-shaped frame 21. The frame 21 is formed with vertical sides 22 which are positioned against the inner sides of the side walls 12.

An inking roller 23 is rotatably mounted on a shaft 24 carried by a pair of levers 25 which are rockably mounted on a pivot shaft 26 extending

2

between the side walls 12 at the forward ends of the latter.

A spring 27 is secured between the forward end of each lever 25 and the bottom member 20 so as to constantly urge the levers 25 to rock upwardly at their rear ends and raise the inking roller 23 into contacting relation with an upper roller 28. The upper roller 28 is secured to a shaft 29 having a crank 30 at one end which extends from one of the side walls 12 so that the roller 28 may be rotated in order to provide for an even distribution of ink on the peripheral surface thereof. The upper roller 28 projects through an opening or slot 31 formed in the front wall 14 so that the projecting portion of the roller 28 may be contacted by the fingers so as to ink the fingers.

A document 32 such as a check, note or the like is adapted to be positioned rearwardly of the roller 28 and engages in a guide member 33 which is positioned between the upright walls of the frame 21. The guide member 33 is formed of a pair of spaced apart arcuate walls 34 having a plurality of spaced apart slots 35 therein, and the walls 34 are connected at their lower ends by a connecting wall 36. The lower edge of the document 32 is adapted to rest on a plurality of pins 51 which are carried by a bar or rod which is fixed to a pair of levers 38 carried by a shaft 39. The pins 51 project loosely through the slots 35. The shaft 39 is journaled between the uprights of the frame 21, and as shown in Figure 4 the levers 38 are formed with lateral extensions engaging through arcuate slots 40 formed in the side walls of the housing, and nuts 41 are threaded onto the opposite ends of the rod or bar 37. The nuts 41 provide a means whereby the levers with pins 51 may be adjusted to any desired position within the guide 33 so that a predetermined portion of the document 32 will project upwardly through the slot 42 which is formed in the top wall 13.

An idler roller 43 is journaled on a shaft 44 secured between the uprights of the inner frame 21, and roller 43 is positioned rearwardly of the slot 42 so that when the document 32 is pressed downwardly by the inked fingers the document will bend downwardly onto the roller 43 as shown in dotted lines in Figure 2. Rearward movement of the hand pressing on the document 32 will cause rotation of roller 43 and move the document 32 out of the guide or holder 33.

A light bulb 45 is positioned in a socket 46 which is carried by the partition or intermediate wall 16 within the rear chamber 18. This light bulb is of the type generating black light so that

the fingerprints on the document 32 may be readily viewed as the document is moved over the rear portion of top wall 13 and over rear wall 15. It will be understood that the housing 10 may be formed of translucent material so that the light emanating from bulb 45 will shine through the top wall of the housing. Preferably the side walls of the housing are provided with louvers 47 providing a ventilating means in chamber 18 to maintain the chamber in a relatively cool condition while the light bulb 45 is lighted.

A switch 48 is secured to an upwardly and forwardly inclined wall 49 disposed below the rear wall 15 and is connected to the socket 46. The wall 49 is formed with an opening 50 to provide for projection of light rays to light up the document placed on a table at the rear of the housing.

Referring now to Figure 5 there is disclosed a modified form of this invention embodying a housing 52 having a dome-shaped top wall 53 and a base 54. A partition or dividing wall 55 divides the housing 52 into a forward printing chamber 56 and a rear light chamber 57.

An ink reservoir 58 is secured in the housing 52 in chamber 56 being secured between the upright sides 59 of a U-shaped frame 60 which is positioned within the forward chamber 56. An inking roller 61 is rotatably mounted on a shaft 62 carried by levers 63, and levers 63 are rockably mounted on a shaft 64 extending across the upright sides 59 of U-shaped member 60.

One or more springs 65 are secured to the forward ends of the levers 63 and secured as at 66 to the bottom 67 of the frame 60. A transfer roller 68 is secured to a crankshaft 69 journaled between the side members 59 of frame 60, and inking roller 61 is held against roller 68 and partially projects into reservoir 58 so as to provide for spreading of ink on roller 68 when the latter is rotated by the crankshaft 69. A portion of roller 68 projects outwardly through a slot 70 formed in the forward portion of top wall 53 so that roller 68 may be contacted by the fingers in order to transfer the ink from the periphery of roller 68 to the fingers.

The frame 60 is provided with a pair of downwardly and inwardly inclined slots 71 within which a document is adapted to be positioned, and the top wall 53 is also formed with a slot 72 in order that a portion of the document may project above the top wall 53. An idler roller 73 is rotatably mounted on a shaft 74 carried by the sides 59 of frame 60 and is positioned rearwardly of the slots 72. Roller 73 projects through an opening 75 formed in the top wall 53 and is adapted to be rotated by the fingers pressing the document downwardly and rearwardly as the fingers and hand are moved from roller 68 upwardly and rearwardly.

A light bulb 76 is mounted in a socket 77 disposed in chamber 57, and chamber 57 is provided with a rear opening 78 through which the light rays are adapted to project so that the document which has been fingerprinted may be positioned below the opening 78 in order that the light rays may engage the confronting side of the document.

A switch 79 is carried by an upright wall 80 projecting downwardly from the opening 78 and is connected to the light socket 77.

In the use and operation of this fingerprinting machine, the desired ink is placed in the ink reservoir 19. If desired, this ink may be of the invisible type. The document which is to be

fingerprinted is inserted in the guide 33, and levers 38 are vertically adjusted so that a substantial portion of document 32 will project above the top wall 13. Roller 28 is rotated by turning crank 30 so that the surface of roller 28 will be thoroughly and evenly inked by transfer of the ink from roller 23. The fingers are then pressed onto the projecting portion of roller 28, and the hand is then moved forwardly so that the now inked fingers will come into contact with the projecting portion of document 32. The hand is moved additionally rearwardly with document 32 riding over rear roller under pressure from the hand and fingers.

The particular quality of the finger print can be easily and quickly determined by moving the document rearwardly to operative position with respect to light bulb 45.

What is claimed is:

1. A fingerprinting machine comprising a housing formed of a base, opposite side walls, a top wall and front and rear walls, an ink reservoir in said housing, a transfer roller, means supporting said roller to dispose a portion thereof partly in said reservoir and partly above said reservoir, a second roller rotatably disposed in said housing engaging said first roller, said housing having a transverse slot through which said second roller partly projects, a crank fixed relative to said second roller, and a third roller rotatably carried by said housing rearward of said second roller and projecting partly through said top wall, said housing having a slot in said top wall between said second and third rollers for removably receiving an article to be imprinted, the third roller being positioned for rotation by the rearward movement of the article being imprinted.

2. A fingerprinting machine comprising a housing formed of a base, opposite side walls, a top wall and front and rear walls, an ink reservoir in said housing, a transfer roller, spring-pressed means supporting said roller to dispose a portion thereof partly in said reservoir and partly above said reservoir, a second roller rotatably disposed in said housing engaging said first roller, said housing having a transverse slot through which said second roller partly projects, a crank fixed relative to said second roller, and a third roller rotatably carried by said housing rearward of said second roller and projecting partly through said top wall, said housing having a slot in said top wall between said second and third rollers for removably receiving an article to be imprinted, the third roller being positioned for rotation by the rearward movement of the article being imprinted.

3. A fingerprinting machine comprising a housing formed of a base, opposite side walls, a top wall and front and rear walls, an ink reservoir in said housing, a transfer roller, means supporting said roller to dispose a portion thereof partly in said reservoir and partly above said reservoir, a second roller rotatably disposed in said housing engaging said first roller, said housing having a transverse slot through which said second roller partly projects, a crank fixed relative to said second roller, a third roller rotatably carried by said housing rearward of said second roller and projecting partly through said top wall, said housing having a slot in said top wall between said second and third rollers for removably receiving an article to be imprinted, the third roller being positioned for rotation by the rearward movement of the article being imprinted, and a light bulb in said housing rearwardly of said

5

third roller for illuminating the article after the latter has been imprinted.

4. A fingerprinting machine comprising a housing formed of a base, opposite side walls, a top wall and front and rear walls, an ink reservoir in said housing, a transfer roller, means supporting said roller to dispose a portion thereof partly in said reservoir and partly above said reservoir, a second roller rotatably disposed in said housing engaging said first roller, said housing having a transverse slot through which said second roller partly projects, a crank fixed relative to said second roller, and a third roller rotatably carried by said housing rearward of said second roller and projecting partly through said top wall, said housing having a slot in said top wall between said second and third rollers for removably receiving an article to be imprinted, the third roller being positioned for rotation by the rearward movement of the article being imprinted, and means limiting the projection of the article into said latter named slot.

5. A fingerprinting machine comprising a housing having an upper wall with a pair of transverse openings spaced longitudinally thereof, an inking roller projecting through the forward one of said openings, means in said housing for distributing ink on said inking roller, a second roller rotatably carried by said housing and partly projecting through the rearward opening, said housing having a transversely disposed slot in said

6

upper wall between said openings for receiving an article to be imprinted, the second roller being positioned for rotation by the rearward movement of the article being imprinted, and a crank connected with said first named roller.

6. A fingerprinting machine comprising a housing formed of a base, opposite side walls and a dome-shaped top wall, said top wall having a pair of spaced transverse openings spaced longitudinally thereof, finger inking means projecting through the forward one of said openings, and a roller rotatably carried by said housing projecting through the rearward opening, said top wall having a slot between said openings and said side walls having slots extending downwardly from said first named slot for removably receiving an article to be imprinted, the second roller being positioned for rotation by the rearward movement of the article being imprinted.

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