

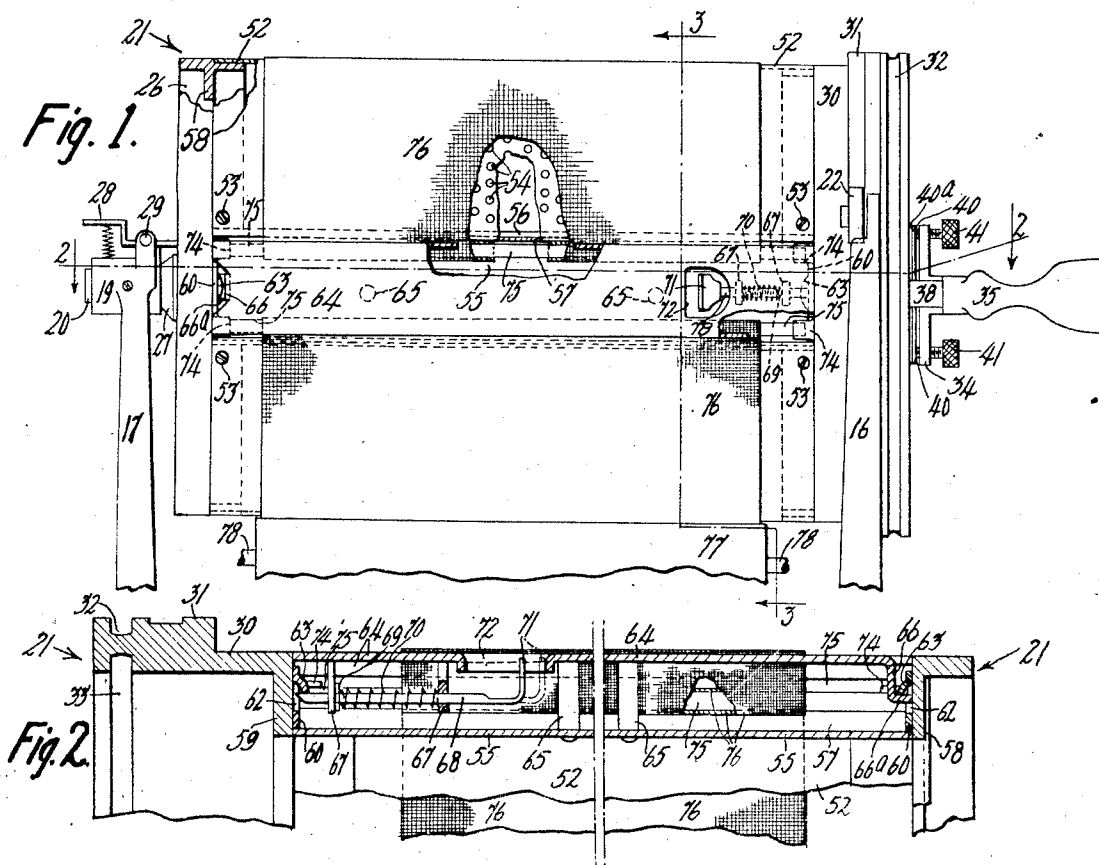
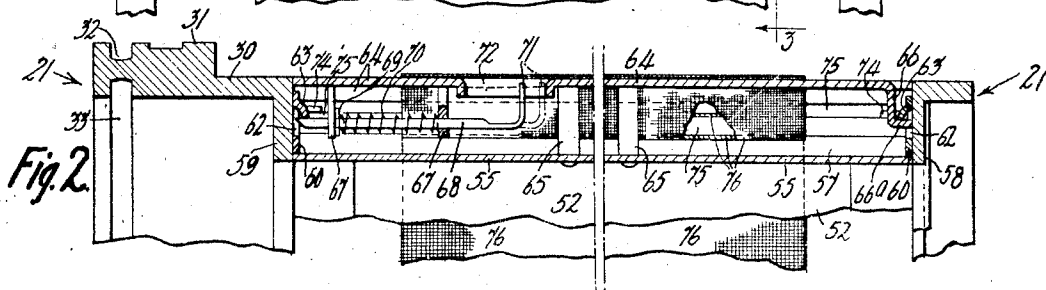
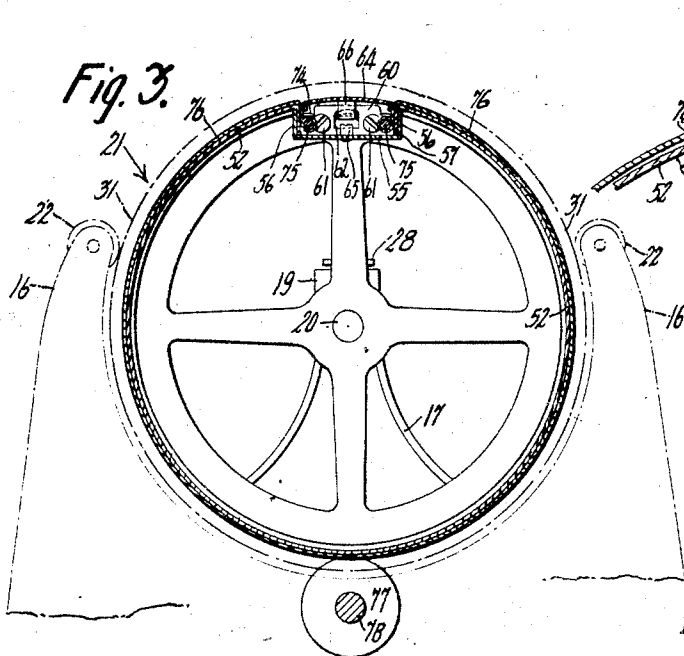
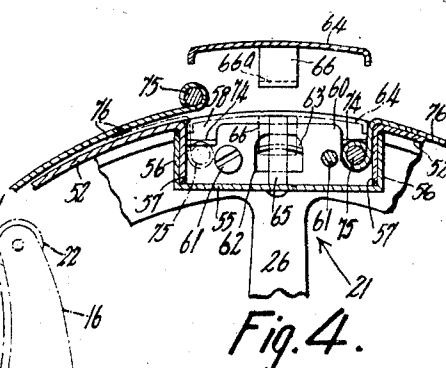
Aug. 24, 1926.

1,597,250

E. G. ROWLEY

STENCILING MACHINE

Original Filed June 24, 1924.



INVENTOR
BY *Edward G Rowley*
B. B. Stickney
ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD G. ROWLEY, OF BELLEVILLE, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPE-WRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

STENCILING MACHINE.

Original application filed June 24, 1924, Serial No. 721,982. Divided and this application filed December 9, 1925. Serial No. 74,279.

This invention relates to duplicating machines, in which a perforated drum or cylinder is covered with an ink-blanket, saturated with ink applied to the interior of the cylinder and overlaid with a stencil, between which and the pressure-roll the paper to be stenciled is passed.

A feature of the present invention is the provision of means for securely attaching the ink-blanket to the cylinder. This means may include a pair of rods to which the ends of the ink-blanket are secured. The rods are placed in a channel formed in the cylinder, and are held therein by projections on the end walls of the channel.

Another feature of the invention is the provision of a cover for closing the opening of the channel. The cover is so constructed that when it is in place its outer surface conforms with the periphery of the drum, so as not to impair its cylindricity. For attaching the cover to the drum, the former is provided at one end with an out-turned edge which engages with a rigid lug on one of the end walls of the channel. At the other end the cover is held in position by means of a latch or bolt, which co-operates with a rigid lug on the wall at the end of the channel, the bolt being operable through an opening in the cover when the latter is to be removed.

This application is a division of my co-pending application, Serial No. 721,982, filed June 24, 1924.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front elevational view of an embodiment of the invention, parts being broken away to show the construction.

Figure 2 is a fragmentary longitudinal sectional view of the stencil cylinder taken on line 2-2 of Figure 1 and drawn to an enlarged scale.

Figure 3 is a transverse sectional view taken on line 3-3 of Figure 1, with the cylinder revolved one-quarter of a turn, the supports for the cylinder being shown in dot-and-dash lines, and parts are broken away to disclose structural features.

Figure 4 is a fragmentary transverse sectional view taken through the blanket securing channel and illustrating the manner of its assembly.

In the embodiment shown, the machine will be seen to comprise a support frame consisting of front and rear base bars (not shown) rigidly connected with upright sides 16 and 17, respectively, at the right and left hand side of the machine. The raised portions of the frame side 17 converge to a central boss 19, bored to receive a fixed plug 20 on which is revolvably mounted a cylinder, generally designated by the numeral 21, in such manner as to be readily removed. The right-hand side frame 16 has diverging U-shaped upper elements on which are mounted revoluble trundles or rolls 22, engaging the cylinder 21 on opposite sides above its center.

The cylinder is open at the end carried in the trundles, and fixed in the other end is a spoked head 26, having a hub 27, containing an annular groove in which is received the end of a spring-actuated detent 28, mounted on a pivot 29 extending between lugs raised from the boss 19, so that, when the outer end of the detent is depressed, the hub 27 will be free to move off the stud, permitting the cylinder to be drawn outwardly from between the trundles, clear of the machine.

At the outer, opposite end of the cylinder is a rigid, annular head 30, increased in diameter to present a ring 31, on which the trundles 22 bear, and near the outer edge of the head is an annular groove 32, a similar groove 33 being formed in its inner surface.

For revolving the cylinder 21, there is provided a bracket 34, having an extending handle 35, which is held to the end of the cylinder head by radially extending lugs (not shown) integral with the ends of the bracket, the inner portions of the lugs engaging in the groove 32, and a single central clip 38, secured to the bracket by a screw, engages the inner groove 33.

A gib plate 40 is disposed between the main portion of the bracket 34 and the end surface of the cylinder, the plate having a

liner 40* of fiber or like material to contact with the cylinder end when forced there-against by clamp screws 41, having knurled heads for convenience in hand operating, the points of the screws impinging on the plate 40, clamping the bracket at any point along its circumference.

The main body of the cylinder consists of a sheet-metal plate 52, attached to the inner reduced portions of the heads 26 and 30, respectively, by screws 53, and is provided with a plurality of perforations 54 throughout its entire area. The reduced portions of the heads contain openings arranged in alignment and in which is secured a sheet-metal channel 55, over the side walls 56 of which, the ends 57 of the perforated plate 52 are secured, these ends reaching to the bottom of the channel.

Fixed in the ends of the channel, to the inreaching annular rim members 58 and 59 of the heads 26 and 30 respectively, are plates 60, secured in opposed relation by screws 61 and having, at their centers, openings 62 above which the metal is bulged to present inreaching lugs 63 to engage a channel cover plate 64.

The cover plate 64 is curved transversely in conformity with the radius of the cylinder and is supported by posts 65 riveted into the channel bottom.

The edges of the cover 64 are down-flanged to fit within the sides of the channels and one end is sheared and formed to present a clip 66, having an out-turned lower edge 66* to engage below one of the lugs 63. Near the other end of the cover, on its inner side, are secured inreaching lugs 67, spaced and perforated to act as guides for a sliding bolt 68, carrying a transverse pin 69 against which one end of an encircling compression spring 70 abuts, the other end of the spring being seated against the mating lug 67, the action of the spring being to press the beveled end of the bolt into the opening below the lug 63 to be held by it; the opposite end of the bolt 68 is bent upwardly, forming a finger-piece 71, projecting into an opening 72 in the cover, this opening being of ample size to permit the entrance of a finger in retracting the bolt.

Also formed on the plates 60, at their ends, are inreaching projections 74 relatively short and narrow to engage over the ends of rods 75 to which are attached the ends of an ink-blanket 76. It will be understood that the length of the blanket is such as to pass from one side of the channel over and around the perforated cylinder to the other side, and that it is capable of being stretched by swinging the rods under the projections 74, which hold them in place below the cover.

A roll 77 of soft elastic nature, mounted on a shaft 78, is held in contact with the cyl-

inder by suitable means (not shown), and, together with the cylinder, feeds the sheets past the printing line.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. In a duplicating machine stencil cylinder, the combination with a pair of heads and a perforated body-portion therebetween, of a channel having walls extending rigidly between the heads, a plate attached to each head within the channel at its ends, said plates having openings and integral lugs over the openings, a cover for the channel to rest on the edges of the plates, a catch on the cover to engage below one of the lugs, and a spring-actuated snap bolt carried by the cover to engage under the other lug, said cover having an opening through which the bolt may be retracted.

2. In a duplicating machine stencil cylinder, the combination with a pair of heads and a perforated body-portion therebetween, of a channel having walls extending rigidly between the heads, a plate attached to each head within the channel at its ends, said plates having openings and integral lugs over the openings, a cover for the channel to rest on the edges of the plates, a catch on the cover to engage below one of the lugs, a spring-impelled snap bolt carried by the cover to engage the other lug, there being an opening in the cover into which a part of the bolt extends to facilitate retraction, and posts set in the bottom of the channel to contact with the lower surface of the cover when engaged over the channel.

3. In a duplicating machine stencil cylinder, the combination with a pair of heads and a perforated body-portion therebetween, of a channel having walls extending rigidly between the heads, a plate attached to each head within the channel at its ends, said plates having openings and integral lugs over the openings, a cover for the channel to rest on the edges of the plates, a catch on the cover to engage below one of the lugs, a spring-impelled snap bolt carried by the cover to engage the other lug, there being an opening in the cover into which a part of the bolt extends to facilitate retraction, a pair of ink-blanket rods disposable in the channel from opposite sides thereof, and inreaching extensions formed on said plates to engage over the ends of said rods.

4. In a duplicating machine, the combination with an impression roll, a pair of cylinder-heads and a perforated body-portion therebetween, of a channel having walls extending between the heads, plates attached to the heads within the channel at its ends, said plates having openings and lugs over the openings, a cover for closing the open-

ing of the channel, the periphery of the cover conforming with the contour of the cylinder to complete the same and form a surface upon which said roll may run, and means at the ends of the cover to engage the lugs for securing the cover in position.

5. In a duplicating machine, the combination with an impression roll, a pair of cylinder-heads and a perforated body-portion therebetween, of a channel having walls extending between the heads, plates attached to the heads within the channel at its ends,

said plates having openings and lugs over the openings, a cover for closing the opening of the channel, the periphery of the cover conforming with the contour of the cylinder to complete the same and form a surface upon which said roll may run, and means at the ends of the cover to engage the lugs for securing the cover in position, said means including a catch at one end and a spring-actuated snap bolt at the other end.

EDWARD G. ROWLEY.