

Sept. 26, 1933.

I. P. SIMONSEN

1,928,233

PAD CLAMP FOR DUPLICATING MACHINES

Filed Nov. 3, 1931

2 Sheets-Sheet 1

Fig- 1

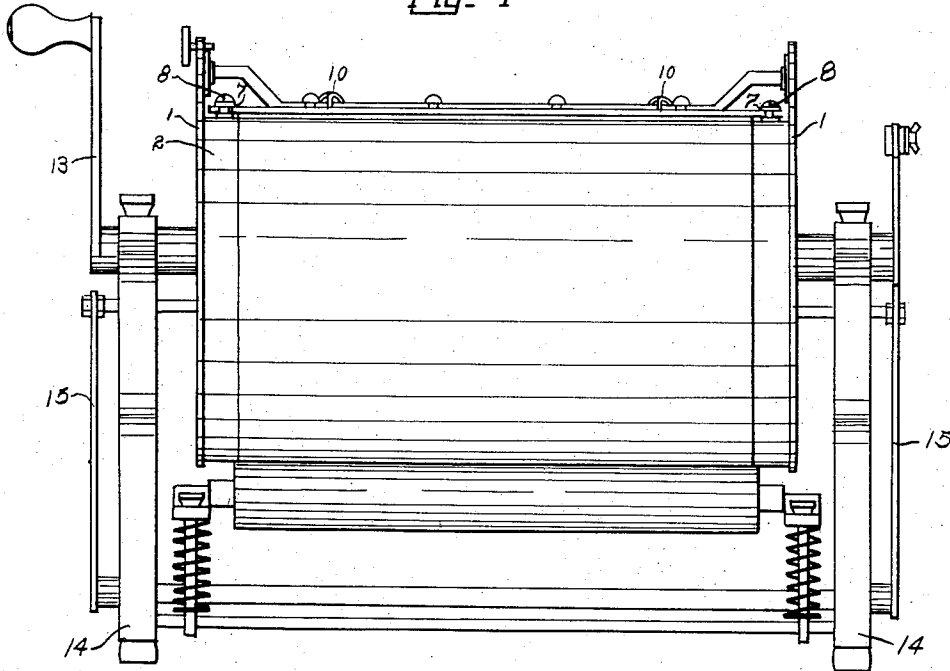
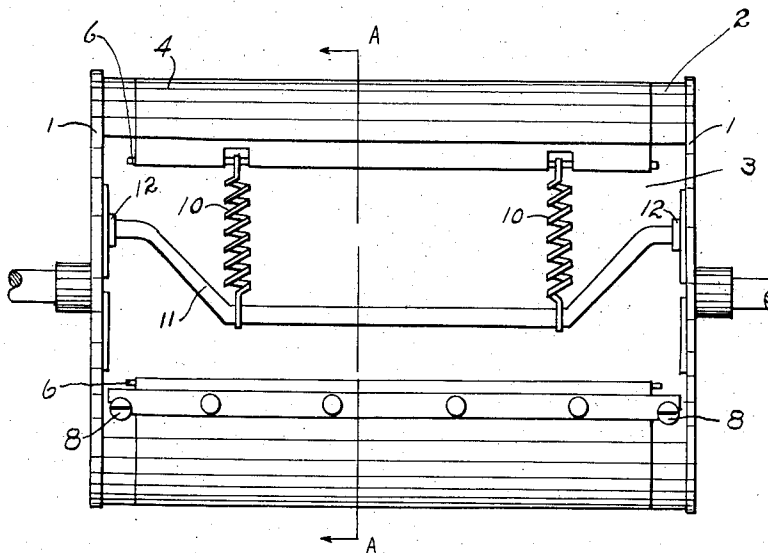


Fig. 2



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Fig- 3

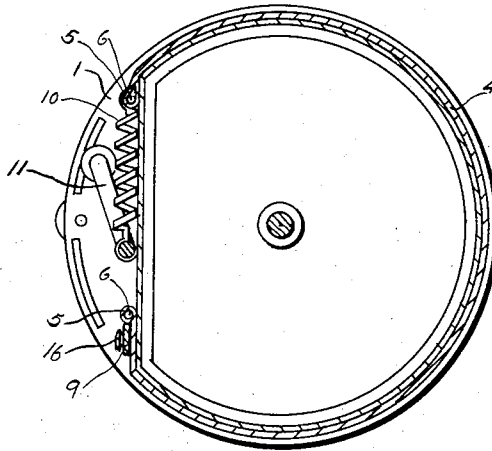


Fig- 4

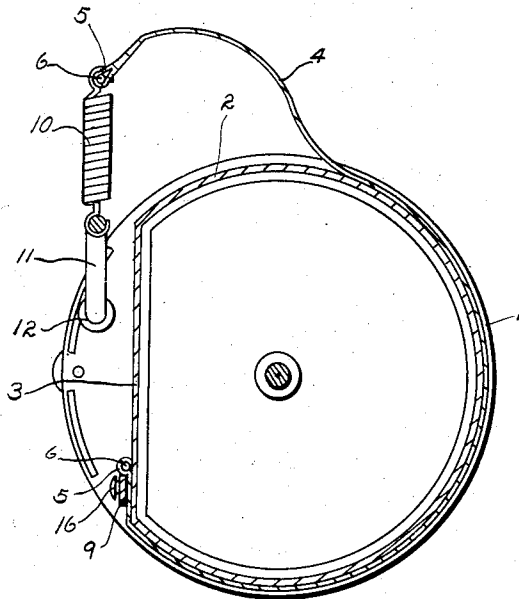
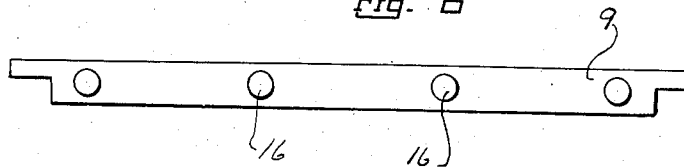


Fig 5



Fig- 6



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PAD CLAMP FOR DUPLICATING MACHINES

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1 Claim. (Cl. 101—415.1)

My invention relates to ink pad clamps for rotary duplicating machines wherein an ink pad is stretched about a stenciling drum.

The primary object of my invention is to provide a pad clamp that will keep a constant tension on the ink pad, thus obviating any wrinkling.

A further object of my invention is to provide a quick and convenient means of removing and replacing the ink pad.

A further object of my invention is to provide an ink pad clamp that will allow the pad to yield instead of tearing in the event it would catch in the mechanism of the machine.

With these and incidental objects in view, the invention consists in certain novel features of construction and combination of parts, a preferred form of embodiment of which is hereinafter shown with references to the drawings, which accompany and form a part of the specifications.

In the drawings:

Fig. 1 is an end elevation of a duplicating machine with the cover plate removed showing the pad clamp.

Fig. 2 is a side elevation of the drum removed from the machine showing the pad clamp and stencil bar.

Fig. 3 is a cross section taken on line A—A Fig. 2 looking in the direction indicated.

Fig. 4 is the same as Fig. 3 showing the pad clamp in a released position.

Fig. 5 is an enlarged view of the step bushing which holds the stencil bar.

Fig. 6 is a plan view of the stencil bar.

Like reference characters refer to like parts throughout the several views.

My pad clamp is shown attached to a stenciling drum consisting primarily of a pair of drum ends 1, fitted to a cylinder 2 having a flat portion 3 to accommodate the pad clamp mechanism. The ink pad 4 is of the conventional material having the loop 5 at each extreme end to accommodate the metal rods 6. A pair of step bushings 7 are secured to the drum by the screws 8. The stencil bar 9 is placed in the grooves 10 of the bushing 7. By this arrangement the stencil bar is held away from the drum's surface al-

lowing the pad 4 to pass between the stencil bar and the drum. However the rod 6 is slightly larger in diameter than the gap between the stencil bar and the drum's surface. Hence when the bar is inserted in the loop 5 of the pad, and tension is put on the pad, the stencil bar is pulled tightly against the step bushings 7. The other end of the ink pad also has a rod 6 to which is hooked the springs 10. The other ends of these springs are hooked to the crank 11 which is hinged in the drum ends in the bearings 12. When the pad is installed the crank 11 is in the position shown in Fig. 4. With the crank in this position there is sufficient slack in the pad that the rod 6 may be easily inserted in the loop 5 of the pad and the hook of the springs 10. The crank is then pulled in the direction of the stencil bar 9 until it touches the flat portion 3 of the drum cylinder 2 as shown in Fig. 3. It may be seen that the crank 11 has travelled past the dead center of its fulcrum point, hence the tension of the springs hold it against the cylinder.

I have observed that when a pad is stretched about a drum and the end secured that the pad either stretches and wrinkles or shrinks and becomes too tight. These two obstacles are overcome in my pad clamp by having a constant spring tension on the pad thus allowing a more uniform ink flow in the pad.

While the above mechanism herein shown and described is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the one form of embodiment herein shown and described as it is susceptible of embodiment in various forms, all coming within the scope of the claim which follows:

What I claim is:

A pad clamp for duplicating machines comprising a drum, a pair of step bushings, a stencil bar for engagement with the bushings, a pad, a pair of pad rods disposed in opposite ends of the pad, one end of said pad passing between the stencil bar and the drum, a pair of springs secured to the other end thereof, a crank for tightening the springs and the pad.

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