

Oct. 25, 1932.

L. HILL ET AL

1,884,685

METHOD OF RECONDITIONING PRINTING PLATES

Filed Sept. 6, 1929

Fig. 1.

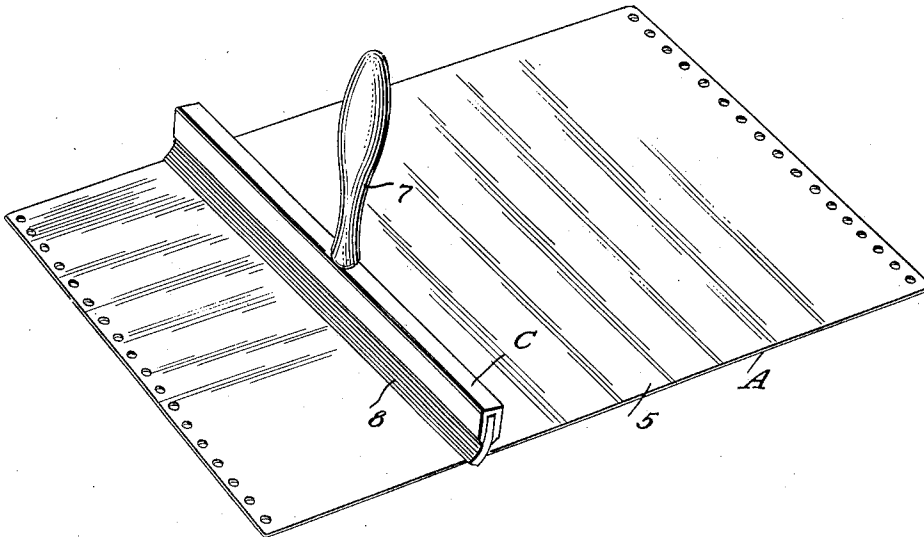
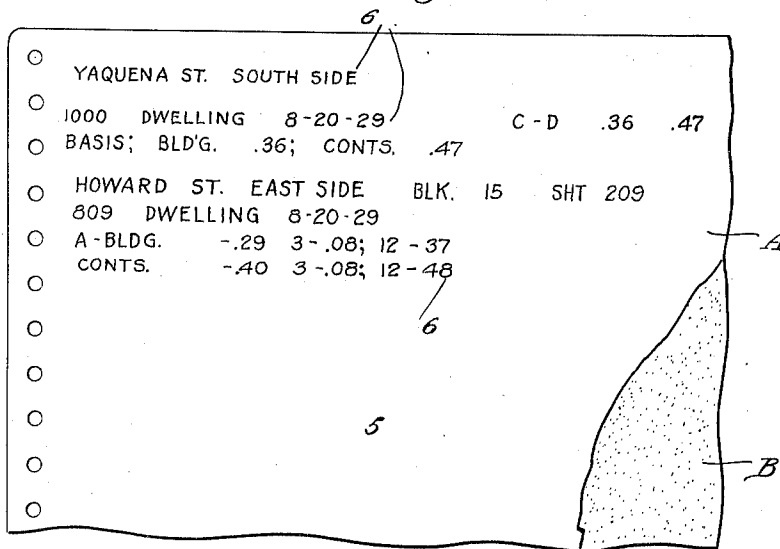


Fig. 2.



Landon Hill
John Douglas Hobby
INVENTOR
BY Victor J. Evans
ATTORNEY

UNITED STATES PATENT OFFICE

LONDON HILL AND JOHN DOUGLAS HOBBY, OF RALEIGH, NORTH CAROLINA

METHOD OF RECONDITIONING PRINTING PLATES

Application filed September 6, 1929. Serial No. 390,842.

This invention relates to a method of reconditioning metal plates used in rotary planographic printing machines, so that the plates can be used over and over again.

5 To enable a clearer understanding of the various steps of the method constituting the present invention, reference will be had to the accompanying drawing wherein:

10 Figure 1 is a perspective view of a reconditioned metal plate with the wiper in a position thereon for the wiping thereof, this being the final step in the method.

15 Figure 2 is a fragmentary plan view of the plate prior to cleaning the same, a portion of the plate being broken away to show the paper backing therefor.

In carrying out the invention and with reference to the accompanying drawing the plate A, which is made from an aluminum sheet is placed on a flat surface, with its metal face 5 uppermost, and then the metal face is wiped off with a damp cloth or the like. A cleansing fluid, preferably consisting of potassium hydroxide and water, is then applied to the metal face 5 with a cloth, mop or the like. The entire surface should be freely covered with the cleansing fluid. This cleansing fluid should remain on the plate A anywhere from one-half minute to five minutes, or until there is evidence of the dissolving of the ink 6 or other impressions on the plate made from the use of the plate. Then a small amount of powder, such as pumice powder, is sprinkled on the surface of the plate, after which the plate is rubbed with the cloth or mop, wet with the cleaning fluid, and this rubbing is continued until the entire surface is free of spots or any evidence of the former use of the plate A, except the actual depressions, if any, made by its former use. The surface of the plate should be kept wet during the rubbing operation. Then the cleaning fluid is wiped off the plate A with a damp and clean cloth, care being taken to not wet the paper backing B which is the standard make-up thereof in case it has not been removed, and then the plate is wiped again with several clean, wet cloths or sponges to remove all of the cleaning fluid. Then a clean dry cloth is rubbed over the

plate A, after which the plate is set aside to dry by air. Care must be taken to not touch the clean surface of the plate with the fingers or hands, the plate being handled by the fingers engaging the edges of the plate A. After the plate has dried, a wiper member C, preferably consisting of a handle part 7 and a strip 8 of rubber containing a suitable abrasive, is drawn over the surface of the plate with the rubber contacting the plate to grain or mark the surface of the plate. Any suitable abrasive material may be embodied in the rubber for this purpose. The member C should be moved back and forth over the plate A from one end to the other and then the strip 8 of rubber is drawn back and forth over the plate from one side to the other, so that the surface of the plate is grained or marked with fine lines which extend at right angles to each other. The member C is passed across the plate under slight pressure and must contact the entire surface. The plate is then ready for use and care must be taken that the metal surface of the plate is not touched with the hands or anything containing oil or grease.

As before stated, with this method, a plate can be reconditioned over and over again and it is not necessary to discard the plate after it has been reconditioned once.

It is more satisfactory to remove the paper backing from the metal plate A, if this is desired by soaking it in water, for instance, before reconditioning it. The plate can be used just as well without the paper backing as it can with it and by removing the paper, the plate can be more easily cleaned during the reconditioning process, as it can be rinsed in a receptacle containing water, and this thorough cleaning of the plate practically eliminates all possibility of the cleaning fluid burning the plate, which would render it useless.

What we claim is:—

1. The herein described method of reconditioning metal plates used in printing apparatus, consisting in first treating the metal surface of the plate with a cleansing fluid to remove ink or other substances on the plate, then removing the cleansing fluid from

the plate and permitting the plate to dry and finally drawing a strip of rubber containing an abrasive back and forth over the surface of the plate.

- 5 2. The herein described method of reconditioning metal plates used in printing apparatus, consisting in first treating the metal surface of the plate with a cleansing fluid to remove ink or other substances on the plate, then removing the cleansing fluid from the
10 plate and permitting the plate to dry and finally drawing a strip of rubber containing an abrasive back and forth over the surface of the plate, the rubber being passed back and forth from one end of the plate to the
15 other and then back and forth from one side edge of the plate to the other.

In testimony whereof we affix our signatures.

20

LANDON HILL.
JOHN DOUGLAS HOBBY.

25

30

35

40

45

50

55

60

65