

R. H. DUNNET.
 FOUNTAIN DIVIDING EQUIPMENT FOR MULTICOLOR PRESSWORK.
 APPLICATION FILED AUG. 21, 1914.

1,165,160.

Patented Dec. 21, 1915.
 2 SHEETS—SHEET 1.

Fig. 1

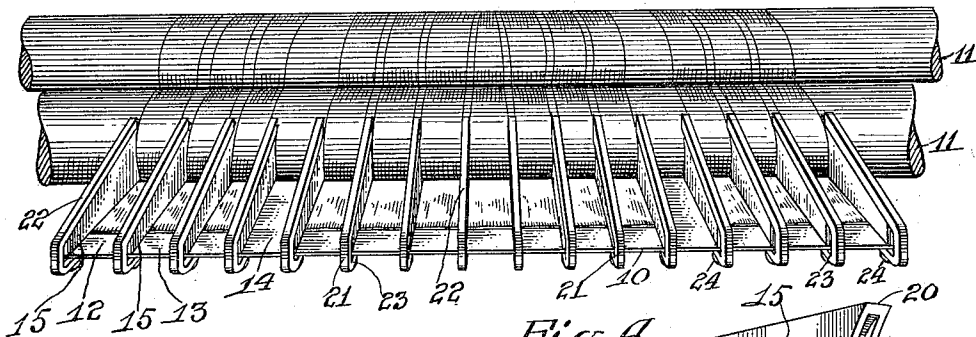


Fig. 4

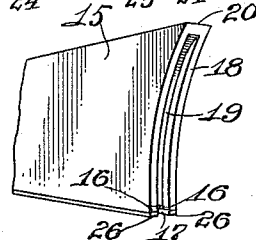


Fig. 2

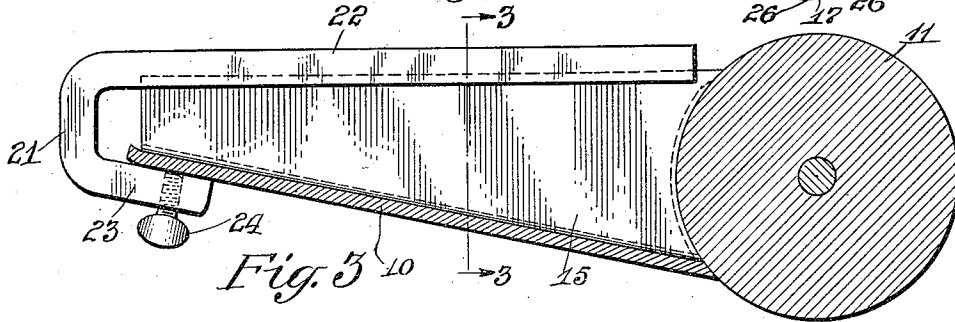
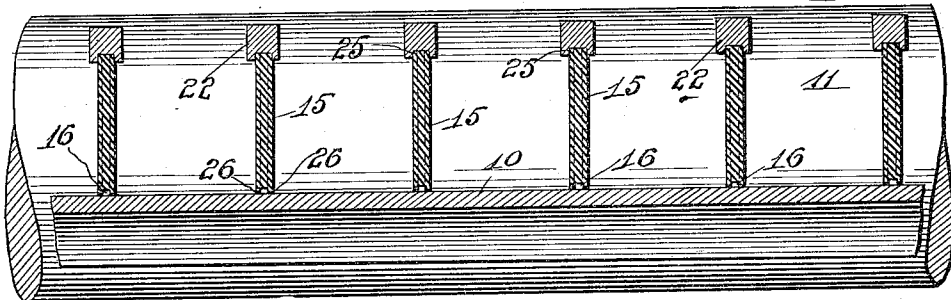


Fig. 5



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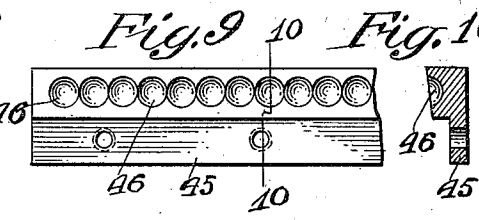
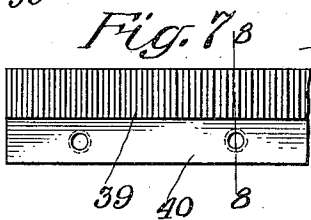
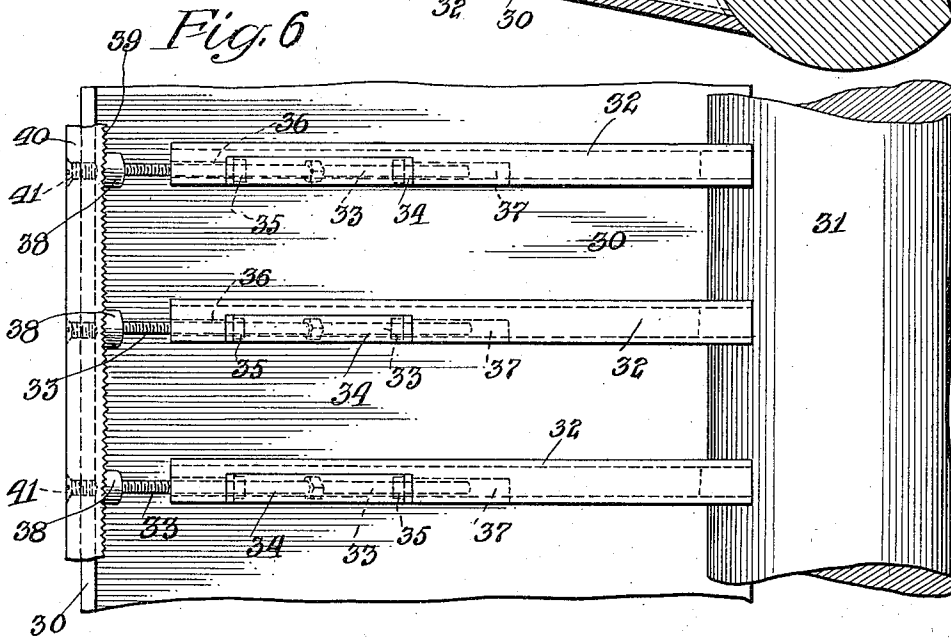
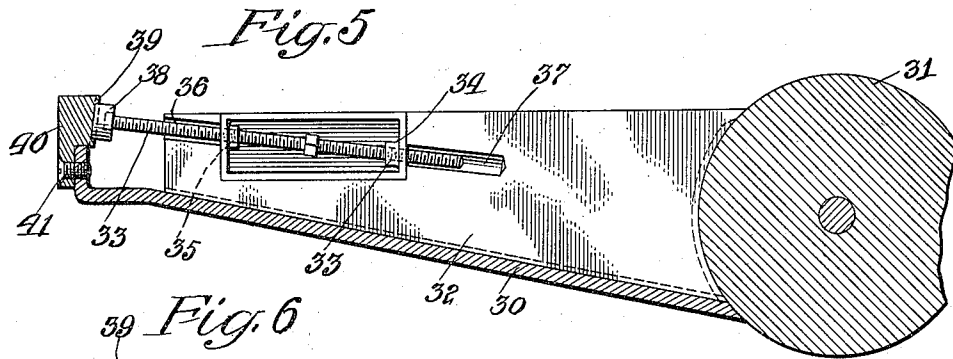
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UNITED STATES PATENT OFFICE.

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FOUNTAIN-DIVIDING EQUIPMENT FOR MULTICOLOR PRESSWORK.

1,165,160.

Specification of Letters Patent.

Patented Dec. 21, 1915.

Application filed August 21, 1914. Serial No. 857,846.

To all whom it may concern:

Be it known that I, ROBERT H. DUNNET, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fountain-Dividing Equipment for Multicolor Presswork, of which the following is a specification.

This invention relates to fountain dividing equipment for multi-color press work.

In printing multi-color work, it is necessary to divide the fountain into compartments which are supplied with the different colored inks. The present invention contemplates to provide fountain dividing means having an accurate fit for effectually preventing the mixing of the different colored inks constituting one object of the present invention.

Another object is to provide fountain dividing apparatus which is durable and efficient.

The various further objects and advantages will more fully appear from the detailed description and the features of novelty will be particularly pointed out in the claims.

In the drawings illustrating the invention, Figure 1 is a fragmental perspective view of a fountain and ink distributing rollers of a printing press showing my improved fountain dividing means applied thereto. Fig. 2 is a cross sectional view through the fountain and ink distributing roller, showing the fountain dividing means on an enlarged scale. Fig. 3 is a section taken along line 3—3 of Fig. 2. Fig. 4 is a fragmental perspective view illustrating the grooved formation of the forward and bottom edges of the dividing wall. Fig. 5 is a sectional view through a fountain illustrating a modified form of dividing wall and adjusting means. Fig. 6 is a fragmental plan view of the fountain showing a number of dividing members of the form illustrated in Fig. 5. Fig. 7 is a fragmental detail elevational view illustrating the adjusting bar. Fig. 8 is a section taken along line 8—8 of Fig. 7. Fig. 9 is a fragmental elevation of a further modified form of adjusting bar. Fig. 10 is a section taken along line 10—10 of Fig. 9.

Referring in detail to the drawings, particularly to Figs. 1, 2, 3 and 4, the fountain 10 from which the ink is taken by the dis-

tributing rollers 11 is divided into a number of compartments 12, 13, 14, etc., by a number of dividers 15, which are adjustably held in position to secure a snug fit with the bottom of the fountain and with the adjacent roller. To secure this snug fit so as to prevent the inks of different colors used in the various compartments from intermixing, I form the dividing wall or blade 15 of some slightly compressible, wear resisting, non-fragile material such as fiberboard and the like and cut the same so as to properly fit the bottom of the fountain and the adjacent distributing roller. Preferably the bottom edge 16 of the divider blade is formed with a central groove 17 which permits a more perfect fit with the fountain and serves to more effectually prevent the intermixing of the adjacent inks. Also the forward edge 18 of the divider blade fitting against the roller is grooved at 19 preferably a part of the way up so as to terminate below the top edge 20.

To firmly clamp the blade in position, I provide an overturned hook shaped clamp 21 consisting of a bar having a top portion 22 which engages the top edge of the blade and the inbent bottom portion 23 engaging the bottom of the fountain and clamped thereto by a suitable thumb screw 24 threaded through the inturned portion 23. When the thumb screw is tightened against the bottom of the trough or fountain, the top portion 22 of the clamp bears downward at its entire length upon the blade 15 and holds the same in snug engagement with the bottom of the fountain. At the same time, owing to the inclination of the trough or fountain, as clearly appears from Fig. 3, a component of the downward clamping force arises in a direction parallel to the bottom of the trough, thus tending to hold the blade snugly against the roller. If desired, the bottom of the portion 22 of the clamp may be grooved as at 25 to receive the top edge of the blade so as to more securely hold the same from displacement. In some cases, I prefer to still further increase the snugness of the fit between the bottom edge of the blade and the fountain. For this purpose, I attach, in any suitable manner, strips of leather 26 or other suitable compressible material unaffected by ink, to the divided bottom edge of the blade. The compressible material acts upon the tightening of the

clamp to fill in any slight inequalities in fit which may arise between the bottom edge of the blade and the trough.

In the modified form illustrated in Figs. 5 to 7, the fountain 30 from which the ink is taken by the distributing rollers 31 is divided by the blades 32 which may be also of fiber or some other suitable material as hereinbefore stated in connection with the first form described. The blade is held snugly in adjusted position by a screw 33 threaded in a frame 34 countersunk in a recess formed in the blade. This frame is preferably formed with the bosses 35 into which the screw is threaded. The recesses 36 and 37 may be formed on either side of the frame for the passage of the screw. For adjusting the screw so as to apply pressure to the blade, the screw is formed with a square portion within the frame which may be engaged by a tool to turn the screw within the threaded bosses. The exterior end of the screw is provided with an abutment through a head 38 mounted upon the exterior end of the screw and suitably swiveled thereon. This head may be formed with serrations which engage the inner serrated face 39 of a bar 40 secured to the exterior edge of the fountain. The interengagement between the serrations of the head and the bar prevent the lateral shifting of the blade and serve as an adjusting means whereby the blade may be adjusted to the proper position so as to regulate the width of the ink compartment.

It will be noted from Fig. 5, that the screw is inclined downward. I preferably employ inclined screw adjustment so as to provide a component tending to press the blade downward as well as inward toward the roller. This component is further increased by the wedging action secured between the fountain and the roller at the bottom portion of the blade. In accordance with the inclination of the screw, the serrated surface 39 of the bar 40 may be also inclined so as to properly engage the head 38.

In the modified construction illustrated in Figs. 9 and 10, the bar 45 corresponding to the bar 40 in Figs. 5 and 8, is formed with the circular recesses 46 which may engage a similarly formed head on the screw. In some instances, this construction may be cheaper to make than the serrated surface previously described.

It will be understood that various modifications may be resorted to within the scope of the invention without departing from the claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In fountain dividing apparatus for multi-color press work, a partition wall of non-fragile non-metallic material, a clamp having a longitudinal groove in which said wall is inserted and provided with an intumed portion adapted to pass underneath of the fountain of the press, and adjustable means provided on said intumed portion for clamping the wall to the fountain.

2. In fountain dividing apparatus for multi-color press work, a partition wall of non-fragile, non-metallic, slightly compressible, wear resisting material formed with a groove at the bottom edge thereof, and removable means engaging substantially the entire top edge of the partition wall for clamping the wall in position.

3. In fountain dividing apparatus for multi-color press work, a partition wall of non-fragile non-metallic material extending across substantially the whole width of the fountain, a lining of compressible material at the bottom edge of the wall and a clamp engaging substantially the entire length of the top of the wall and engaging also the bottom of the fountain for clamping the wall in position.

4. In fountain dividing apparatus for multi-color press work, a blade formed of wear resisting, non-metallic material, and a metal clamp consisting of a hooked bar removably engaging the top of the blade and passing underneath the fountain for clamping the blade in position.

5. In fountain dividing apparatus for multi-color press work, a wear resisting, non-metallic partition wall, and a separate clamp therefor comprising a hooked member removably engaging the top of the wall and the bottom of the fountain, and means passing through the portion underneath the fountain and engaging the bottom of the fountain to hold the clamp firmly against the wall.

6. In fountain dividing apparatus for multi-color press work, a partition wall, and a separate clamp therefor comprising a hooked bar having a grooved portion in which the top of the wall is removably held, said bar also engaging the bottom of the fountain, and means passing through the portion underneath the fountain and engaging the bottom of the fountain to hold the clamp firmly against the wall.

Signed at New York in the county of New York and State of New York this 12th day of August A. D. 1914.

ROBERT H. DUNNET.

Witnesses:

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WM. I. COHEN.