C. WELLS.

Printing-Press.

No. 169,321. Patented Oct. 26, 1875.

FIG. 1.

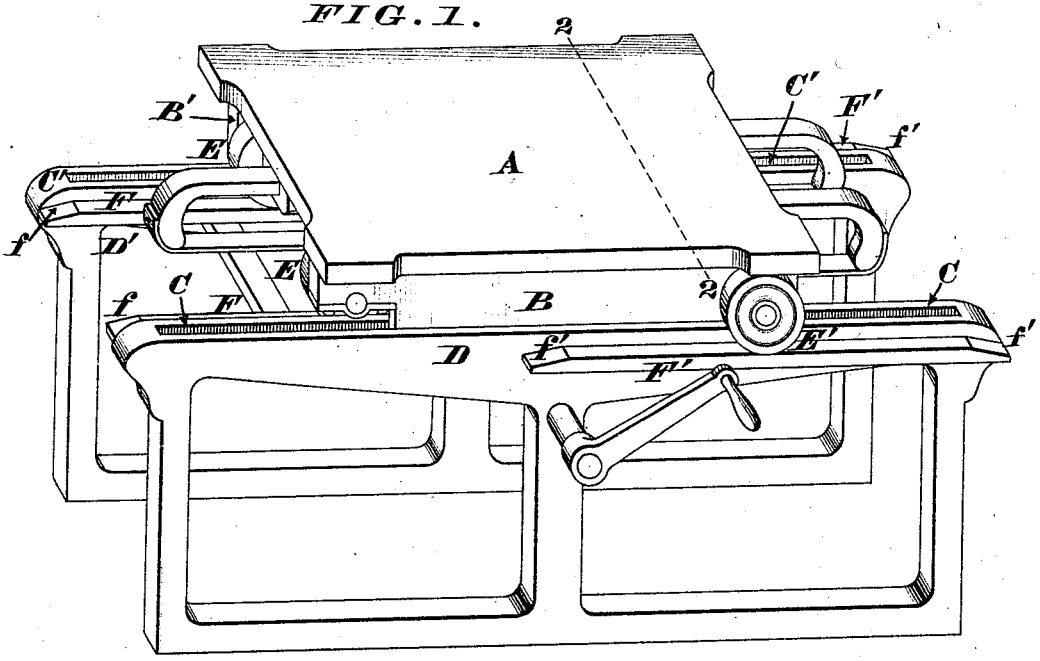


FIG. 2.

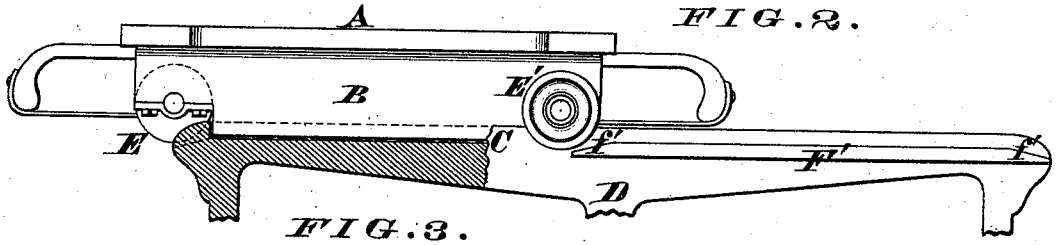


FIG. 3.

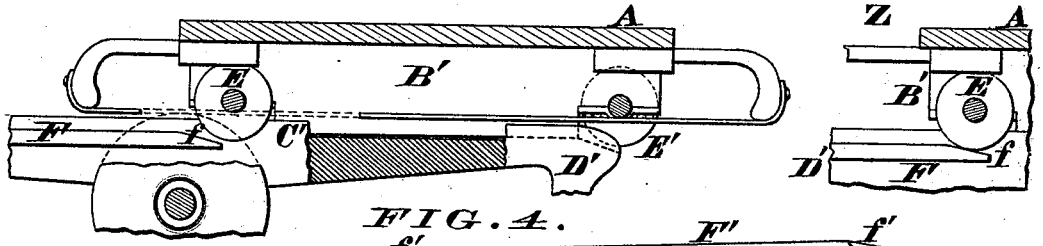
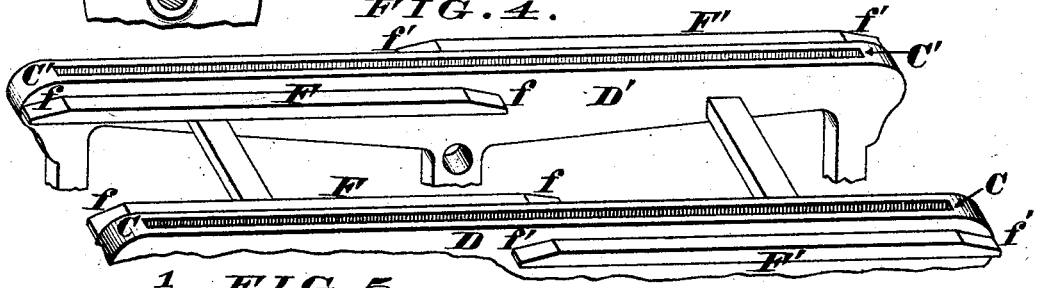
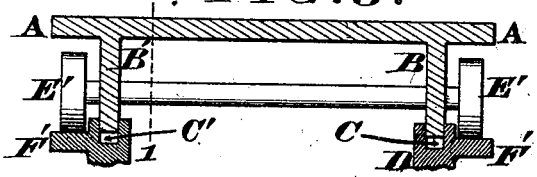


FIG. 4.



1. FIG. 5.



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CHARLES WELLS, OF CINCINNATI, OHIO.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. **169,321**, dated October 26, 1875; application filed August 28, 1875.

To all whom it may concern:

Be it known that I, CHARLES WELLS, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Printing-Presses, of which the following is a specification:

My improvement is designed for those printing-presses whose type-bed is supported upon a track or railway, to enable its ready removal to and from its station under the platen.

It is found in practice that even when lubricated, the friction of the bed along the track is such as to impose a heavy labor on the printer. This friction might, it is true, be greatly reduced by supporting the bed on wheels, but such mode of support upon the customary track would be impracticable for several reasons: The excessive pressure employed in printing requires a solid continuous and even bearing to the bed, which, unless thus supported, would give way at the unsupported places, so as to produce an uneven impression, or even be broken asunder by the stress of the descending platen. Another serious objection to such an arrangement would be the liability of the bed to shift or be shifted accidentally from its position either at the receiving or impressing extremity of the track.

These difficulties I wholly avoid, and at the same time avail all the advantages of a wheel-supported bed by the provision of special tracks for the wheels of such elevation as to support or uphold the bed clear of contact with the base or frame everywhere, except in the two extreme positions of the stroke, in which positions the bed is permitted to rest upon a continuous bearing.

In the accompanying drawing, Figure 1 is a perspective view of a portion of a printing-press embracing my improvement, the bed being shown in an intermediate position, and consequently resting upon the rollers. Fig. 2 is a side elevation, showing the bed shifted to one extremity of the track and resting solidly thereupon, a portion of the main frame being shown in section. Fig. 3 is a longitudinal section at the line 1 1, showing the bed at rest at the opposite extremity of the track. Fig. 4 is a perspective view of the tracks, and Fig. 5 is a section at the line 2 2.

A may represent a type-bed of any convenient form and size. The under side of the bed has two parallel keels or runners, B B, which occupy grooves or gutters C C in the frame-sills D D. At the extremities of the stroke the bed rests solidly and continuously on the floor or bottom of said grooves, as seen at Figs. 2 and 3. At all other or intermediate portions of its stroke the bed is upheld from contact with the groove floor by wheels or rollers E E′, which rest upon flanges F F′, which may project from the sills D D′, as shown, and which terminates with inclined planes *f f′*, to enable the wheels E E′ to easily roll onto or off of the said flange without jarring the bed or imposing unnecessary labor on the pressman.

Of the two extremities of the stroke, that at which it is most important to secure a continuous and immovable bearing is the impression end, and a valuable improvement on existing presses is made by such provision at this end alone, and which I therefore claim; but in its most complete form my improvement includes such a provision at each end of the track, as above stated.

In diagram Z a roller is shown as in the act of ascending one of the inclines at the end of a track.

I claim—

1. A printing-press bed, in combination with a permanent way or bearing, on which it rests during impression, and with wheels or rollers to convey it to or from the bearing, substantially as set forth.

2. A printing-press bed, in combination with a permanent way or bearing, on which it rests during feed, and with wheels or rollers to convey it to or from the bearing, substantially as set forth.

In testimony of which invention I hereunto set my hand.

CHARLES WELLS.

Attest:

GEO. H. KNIGHT,

S. B. SPEAR.