

S. CRUMP.  
Means for Locking Plates to Beds of Printing-Machines.

No. 224,658.

Patented Feb. 17, 1880.

Fig 1

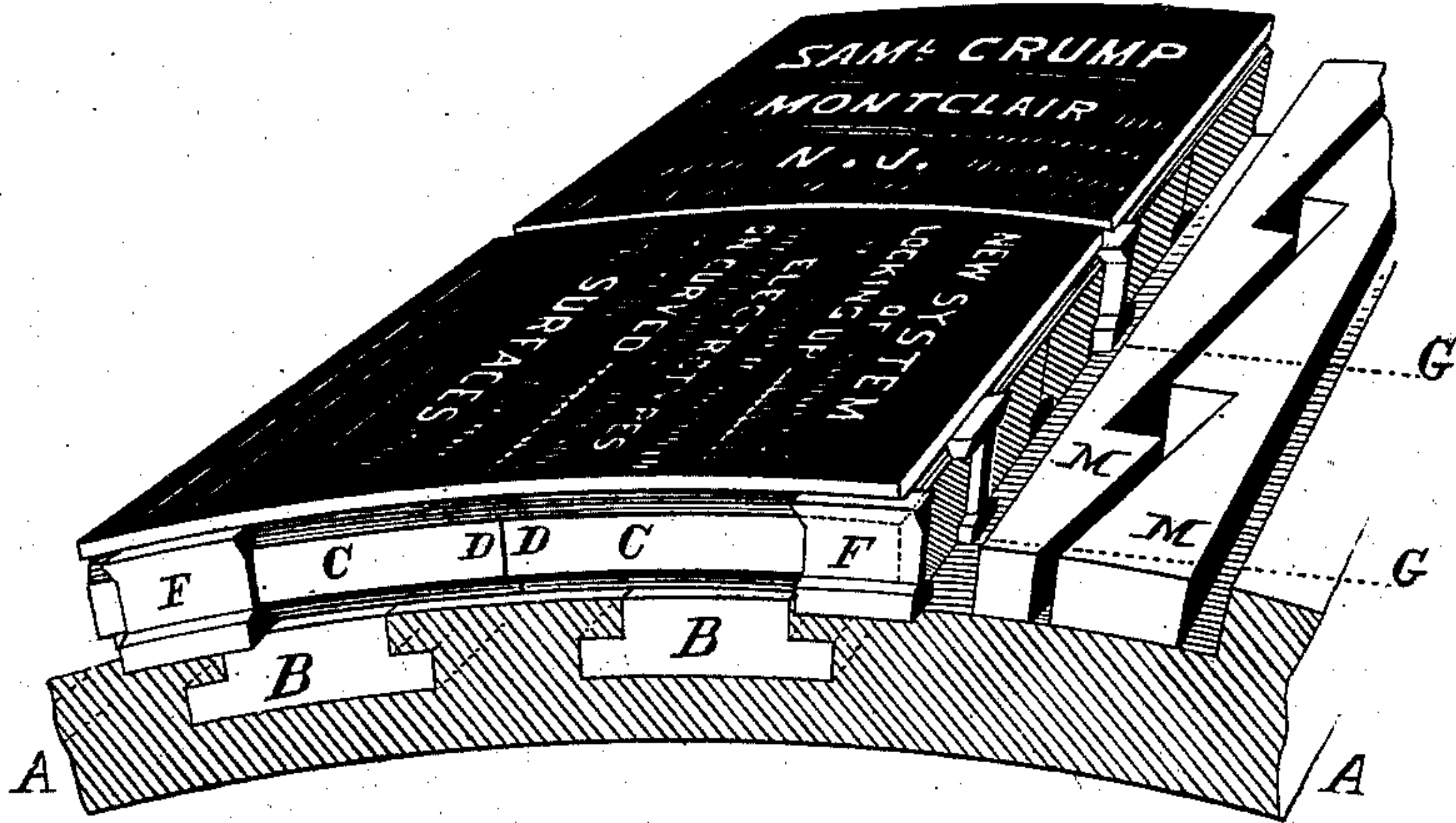


Fig 4

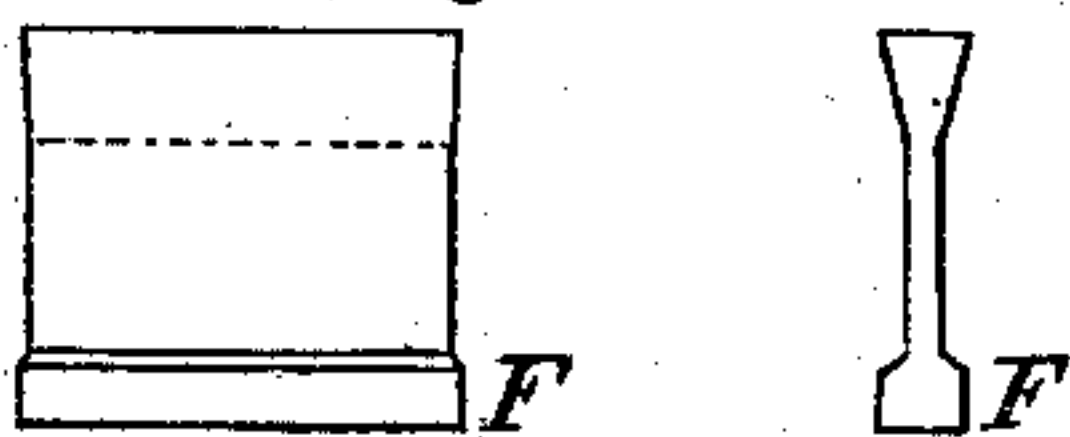


Fig 6

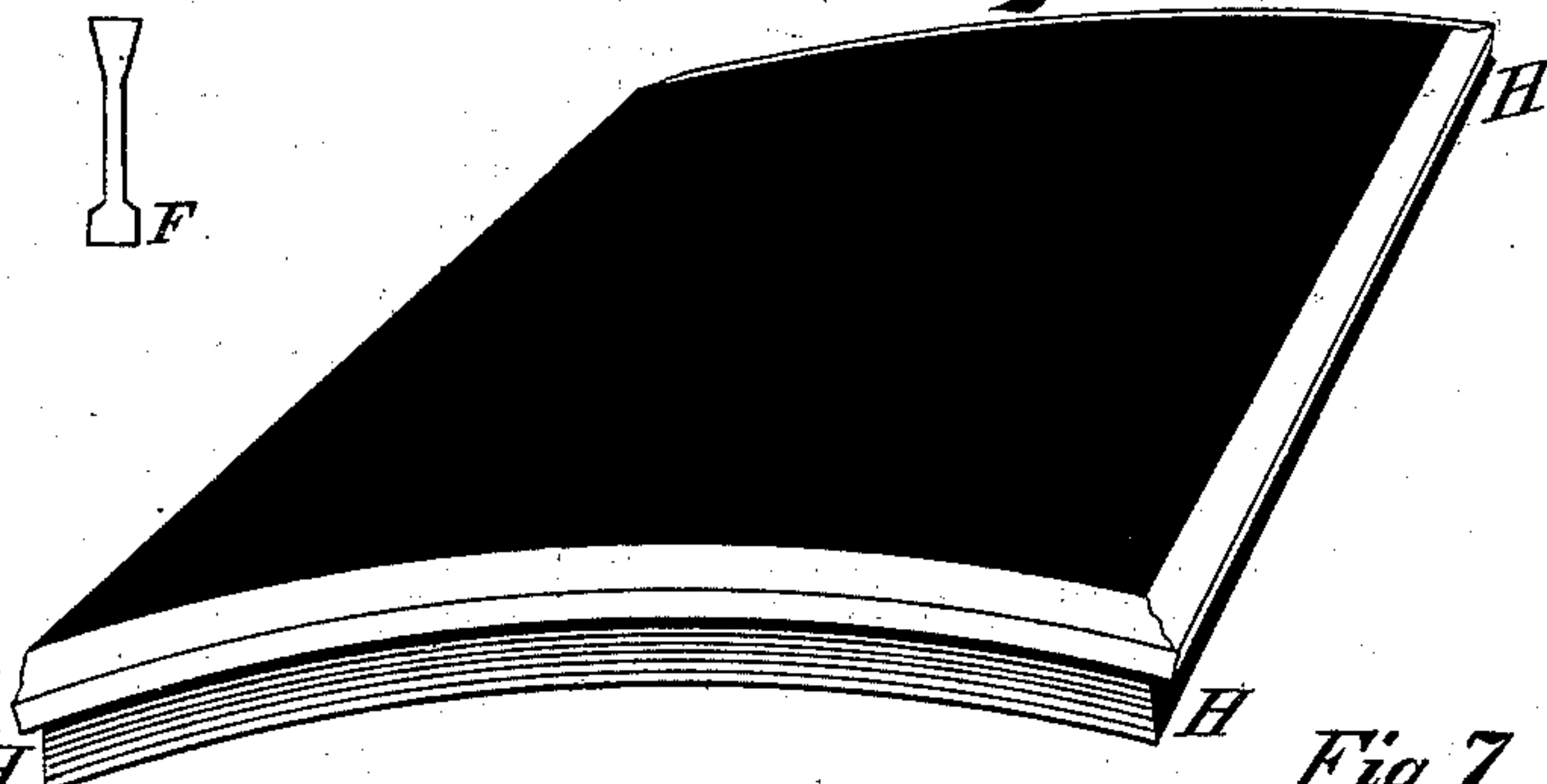


Fig 5

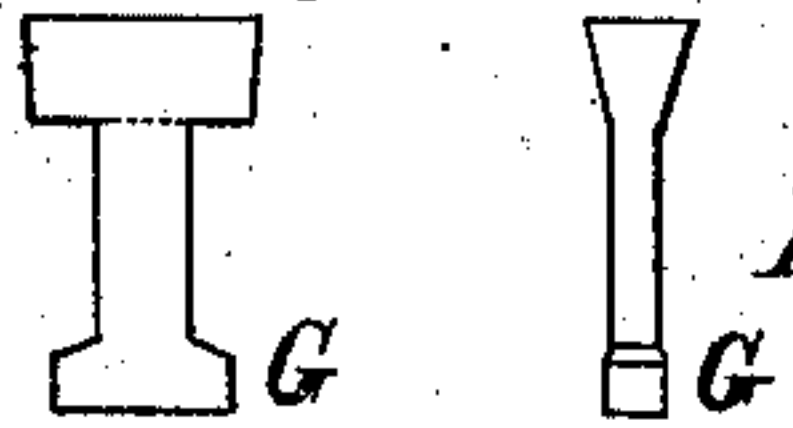


Fig 7

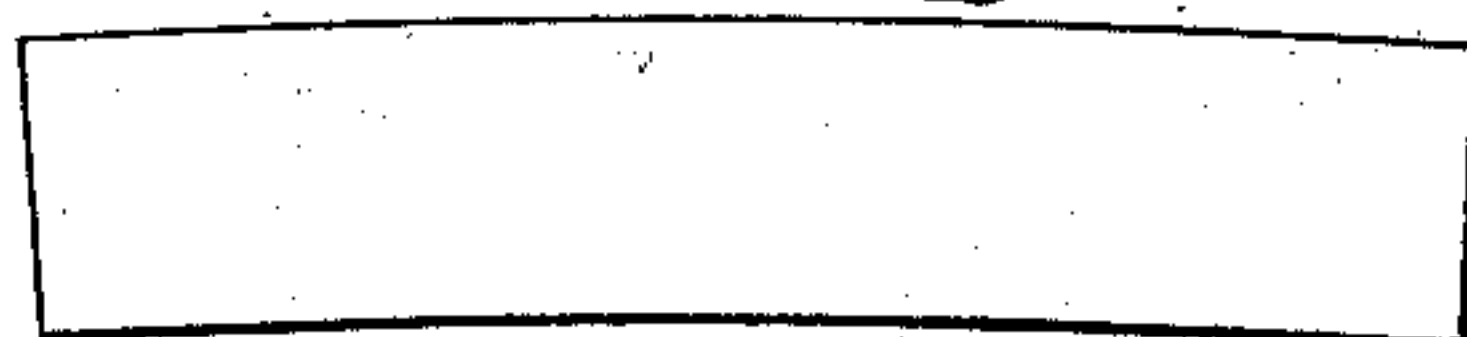


Fig 8



Fig 3

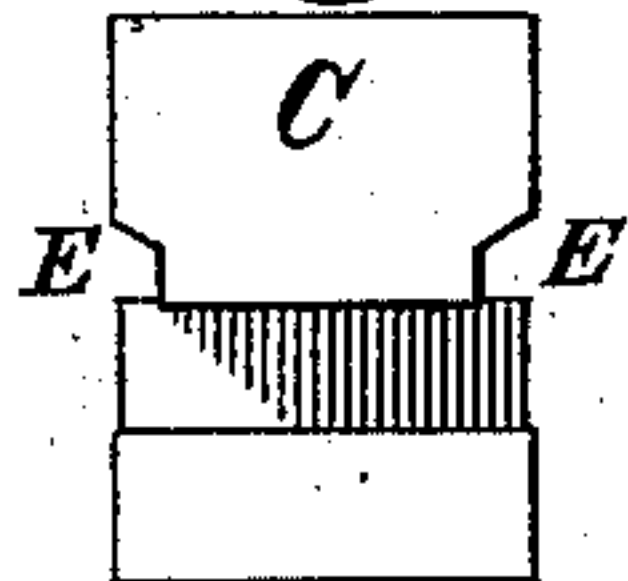


Fig 2

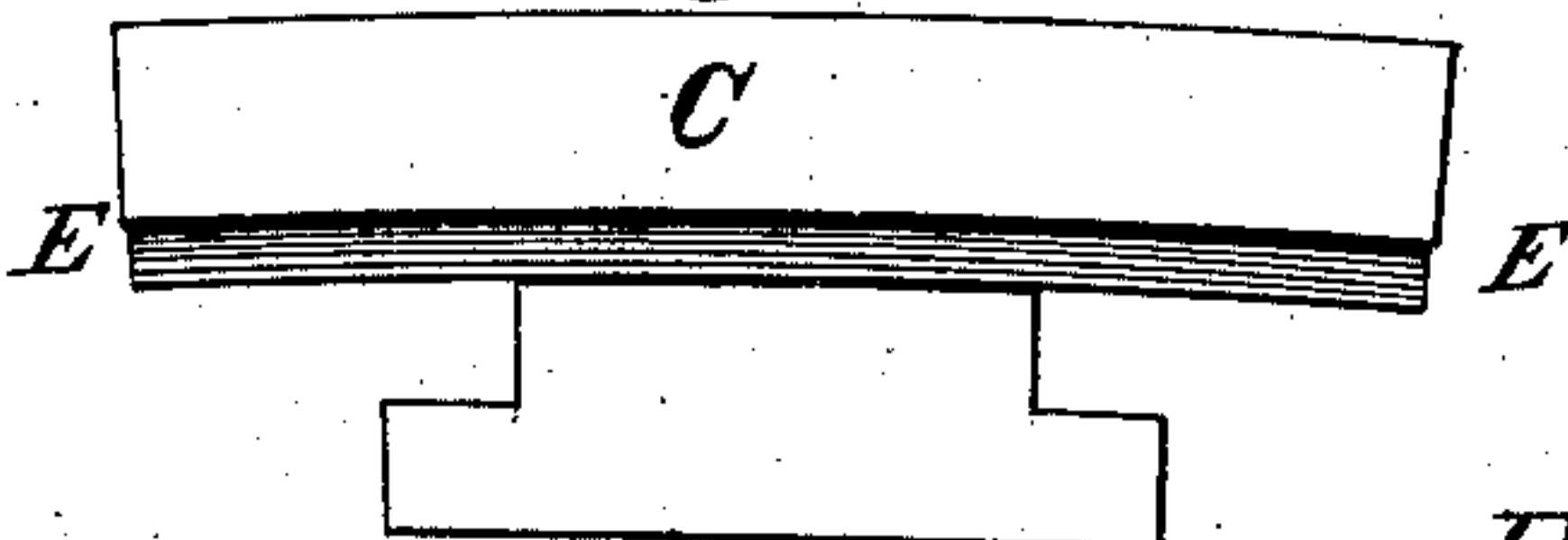


Fig 10

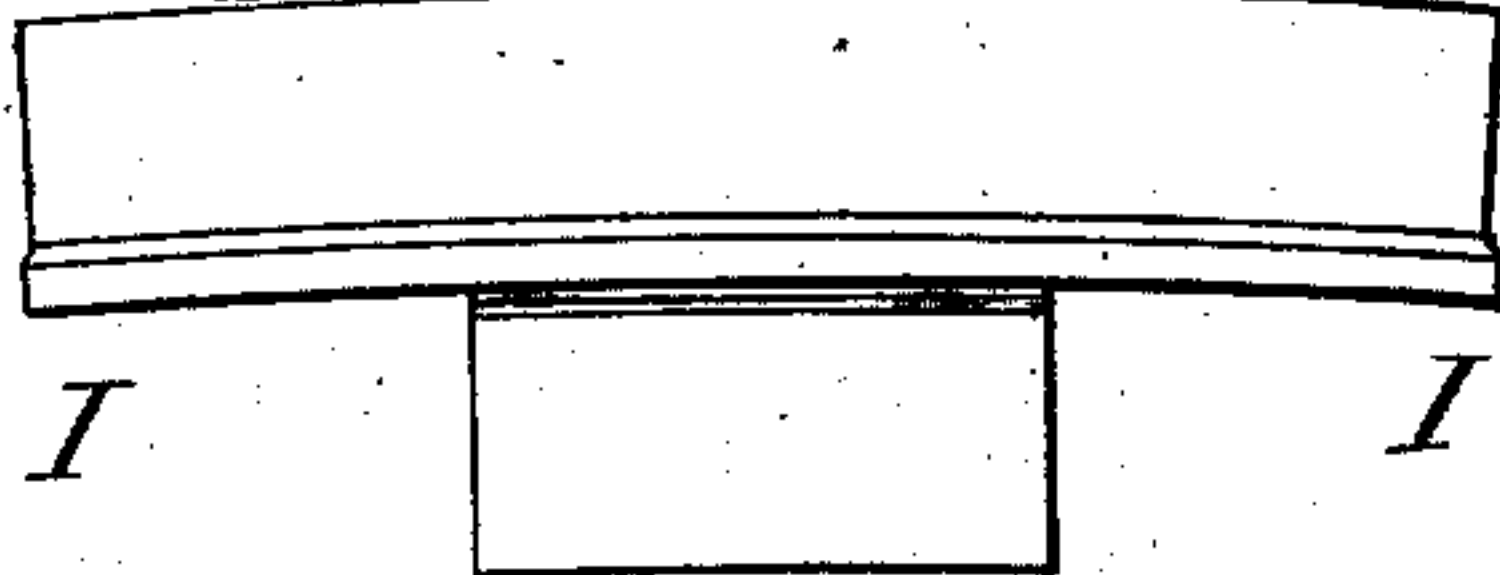
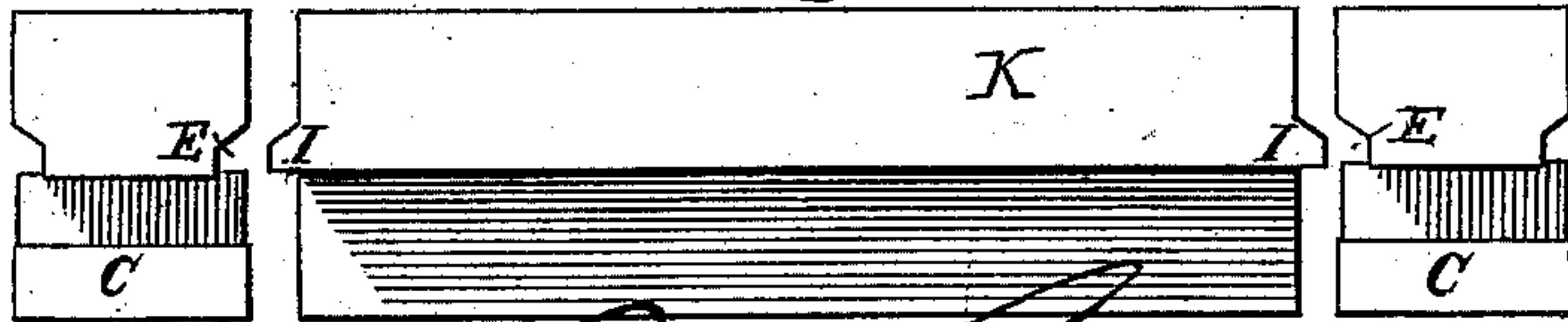


Fig 9



Witnesses:  
Chas. B. Hill  
J. Ryan

Samuel Crump  
Inventor.



# UNITED STATES PATENT OFFICE.

SAMUEL CRUMP, OF MONT CLAIR, NEW JERSEY.

## MEANS FOR LOCKING PLATES TO BEDS OF PRINTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 224,658, dated February 17, 1880.

Application filed December 17, 1879.

*To all whom it may concern:*

Be it known that I, SAMUEL CRUMP, of Mont Clair, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Means for Locking Plates to Beds of Printing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in means for locking plates to beds of printing-machines; and it consists in the means hereinafter described and claimed for locking up electrotypes and other plates and forms on curved or flat surfaces.

Heretofore difficulty has been experienced in locking plates or forms so as not to shift position when used upon flat-bed printing-presses, and so as not to move or fly off when employed upon cylinder-presses, by the methods commonly known. The object of my invention is to successfully overcome these objections, and to furnish a means whereby the plates and forms may be immovably secured in position with ease and rapidity.

Referring to the accompanying drawings, Figure 1 is a perspective view, showing plates locked upon a curved surface according to my invention. Fig. 2 is a side elevation, and Fig. 3 an end view, of the mounting-block. Fig. 4 represents a side elevation and an end view of the transverse metal lewis, and Fig. 5 denotes similar views of the longitudinal metallic lewis. Fig. 6 is a perspective view of a plate to be mounted and locked in position. Fig. 7 is a side elevation, and Fig. 8 is an end view, of a curved printing-lead which is used for the purpose of justifying. Fig. 9 is a view showing the end of what is called a "dummy mounting-block" between two mounting-blocks proper, indicating the manner in which they come together when in use. Fig. 10 is a side elevation of a dummy mounting-block.

A indicates a section of the form-cylinder of a printing-press, the surface of which cylinder is supplied with any suitable number of longitudinal grooves B, either undercut or dovetail, as may be preferred, into which are inserted the required number of mounting-blocks C, the bases of which correspond with and snugly fit the grooves B, and cannot be removed therefrom except by sliding them out

at their ends, the same as they were inserted. The grooves B must be a sufficient distance apart to permit the ends D of the mounting-blocks C to join, as shown in Fig. 1. These mounting-blocks are curved to the radius of the cylinder, may be of various widths, and have upon their sides the transverse radial grooves E, hereinafter mentioned.

K denotes the dummy mounting-block, which, when in use, is placed between the mounting-blocks C, and is held in place by them. The blocks K have a base with plane vertical sides, and may be inserted in the grooves B at any point on the surface of the cylinder. The blocks K have upon their sides the transverse radial projections or tongues I, which correspond with and fit into the grooves E on the blocks C, whereby they are held in position. If it is just as convenient to employ a sufficient number of the blocks C to cover the surface of the cylinder beneath the electrotypes, the blocks K need not be used at all.

The transverse lewis F and the longitudinal lewis G are simply small metallic blocks having a head at each end, the head on the lower end fitting into the grooves E of the mounting-blocks C, both at their sides and ends, and the head on the upper end fitting into the groove H around the edge of the electrotypes. The groove H is beveled outward, and is clearly shown in Fig. 6.

The mounting-blocks being in position upon the form-cylinder, the plates to be printed from are placed upon them so that their transverse and longitudinal edges will be about on the same plane with the ends and sides of said blocks. The lewis F G are now inserted in the grooves E H, as above described, and locked in such position by the quoins M or other suitable means. The plates are thus held in a fixed position, and cannot be withdrawn except by removing the quoins and lewis.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A means for locking plates or forms having a groove, H, upon a cylinder or flat-bed press provided with grooves B, which consists of the mounting-blocks C, having bases cut to fit the grooves B, and having the grooves E, of the lewis F G, having heads at each end,



and suitable quoins or other devices for locking the same in position, substantially as set forth.

2. The curved mounting-block C, having a  
5 base cut to fit the groove B, in combination with a plate or form having the groove H, and with a lewis for securing the said plate upon the block, substantially as specified.

3. In a press having the grooves B, the  
10 mounting-block C, having a base cut to fit the grooves B, and having upon its sides the grooves E, in combination with the dummy-

blocks K, of the construction described, the lewises F G, and a plate or form provided with a groove, H, substantially as specified. 15

In testimony that I claim the foregoing improvement in means for locking plates to beds of printing-machines, as above described, I have hereunto set my hand this 15th day of December, 1879.

SAMUEL CRUMP.

Witnesses:

WM. H. HARRIS,  
D. J. RIKER.