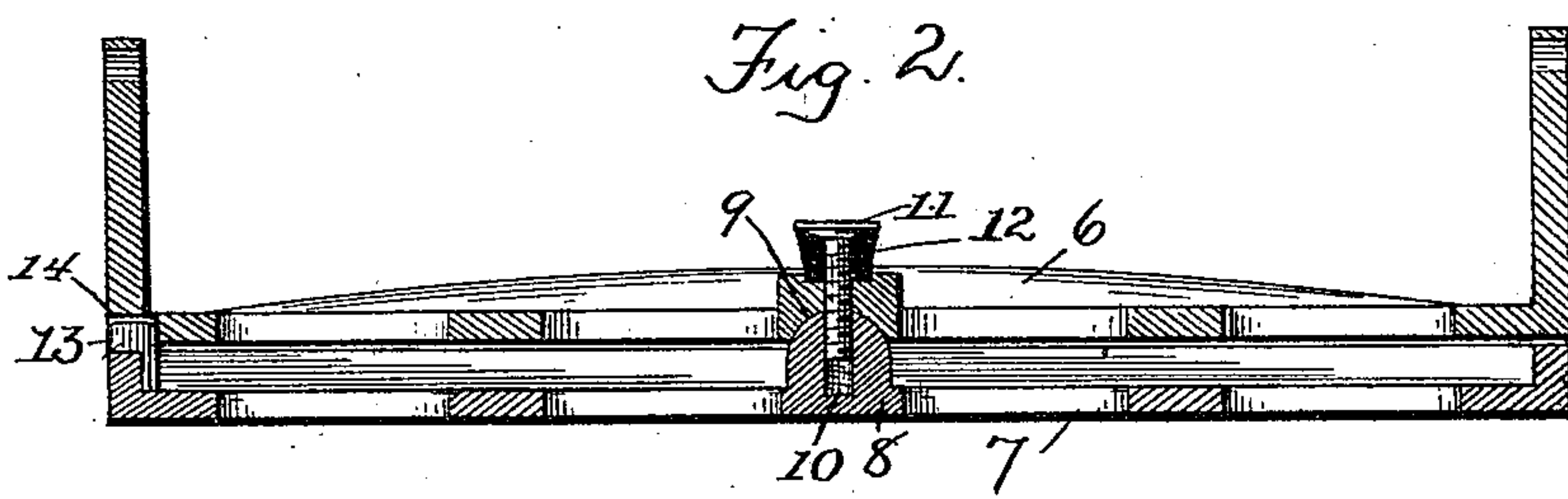
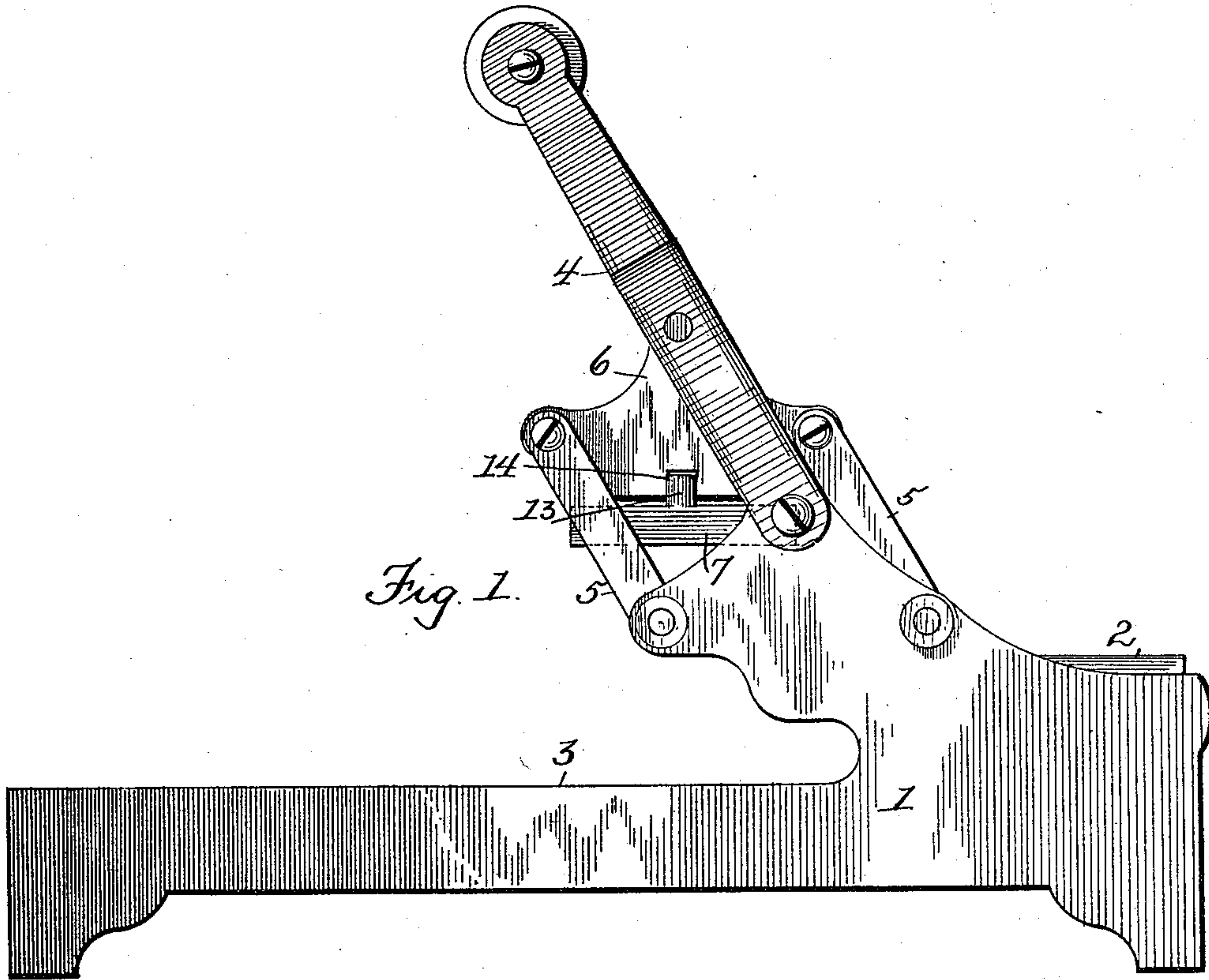


(No Model.)

B. B. HILL.
HAND PRINTING PRESS.

No. 451,971.

Patented May 12, 1891.



Witnesses
J. E. Robertson.
Dr. A. White.

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UNITED STATES PATENT OFFICE.

BENJAMIN B. HILL, OF PHILADELPHIA, PENNSYLVANIA.

HAND PRINTING-PRESS.

SPECIFICATION forming part of Letters Patent No. 451,971, dated May 12, 1891.

Application filed February 11, 1891. Serial No. 381,024. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. HILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hand Printing-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The object of this invention is to improve my hand printing-press patented July 29, 1890, No. 433,169, whereby a good impression is produced even if the type or printing-plate is of varying thickness, as frequently occurs with rubber plates.

Heretofore it has been common to arrange the part that receives or supports the paper so that it may adjust itself to the type or plate producing the impression. This does very well where inking ribbons or rollers are used; but where the type or plate moves backward and forward from the impression-bed to the inking-pad, as in my aforesaid patent, unless the type-plate strikes fair on the inking-pad it does not take ink properly and the result produced is thus imperfect, even if the impression bed or plate is movable to accommodate itself to the irregularity of thickness in the type-plate. By arranging the type-plate or the carrier thereof in such a manner as to yield slightly the plate not only gives a good impression on the paper, but it takes ink evenly from the inking-pad.

My invention consists therefore, mainly, in the combination, with an inking-pad and a printing-surface, of a type-bed provided with means for carrying it from the inking-pad to the impression-surface and back again, and for allowing the same to yield slightly, both when taking ink from the impression-surface and when giving the impression.

In the accompanying drawings, Figure 1 represents a side view of my improved press, and Fig. 2 a central longitudinal vertical section through the form-carrier.

Referring now to the details of the drawings, 1 represents the frame of the press, which may be of any approved form, but preferably substantially like that shown in my aforesaid patent, having like that an inking-pad 2, an impression-bed 3, an operating-lever 4, and links 5 5, pivotally connected with the frame of the press, and a main form-carrier 6. All of these parts may be substantially the same

as shown in my aforesaid patent, except the form-carrier 6, which in my present improvement is provided with a secondary carrier 7, having a semi-globular projection 8 fitting in a corresponding recess 9 in the main carrier 6. In this projection is a threaded hole 10, which receives a screw 11, having beneath its head a ring or thick washer 12, of rubber or other elastic material.

At one end of the secondary carrier is a lug 13, which fits rather loosely in a notch 14 in the main carrier to prevent any lateral motion of one carrier on the other. This is important, as otherwise the lower or secondary carrier 7 would be liable to turn on the projection 8 as on a center, and would thus probably come in contact with any gage that might be employed on the bed below, and instead of printing parallel with the edge of the paper would be likely to make an impression diagonally to the same. With this construction it will be seen a perfect impression may always be given to the paper being printed, even if there is a considerable irregularity in the thickness of the printing-plate, and my new press, with this improvement attached, has been found to be much preferable to the style of press shown in my aforesaid patent.

It is obvious that the type or printing plate may be attached direct to the secondary carrier or be attached to another plate or form, as desired.

What I claim as new is—

The combination, in a hand printing-press, of the frame 1, the inking-pad 2, impression-bed 3, operating-handle 4, and links 5, both lever and links being pivotally connected to the frame, with the main carrier 6, pivotally connected to both lever and links, a secondary carrier loosely attached to said main carrier by a central projection 8, fitting in a recess in the main carrier and fastened thereto by a screw 11, having a rubber ring between its handle and said main carrier, and a lug 13 on one of said carriers fitting into a recess in the other, all substantially as described and shown.

In testimony whereof I affix my signature, in presence of two witnesses, this 10th day of February, 1891.

BENJAMIN B. HILL.

Witnesses:

GEO. W. W. GRAY,
WILLIAM C. STOEVEK.