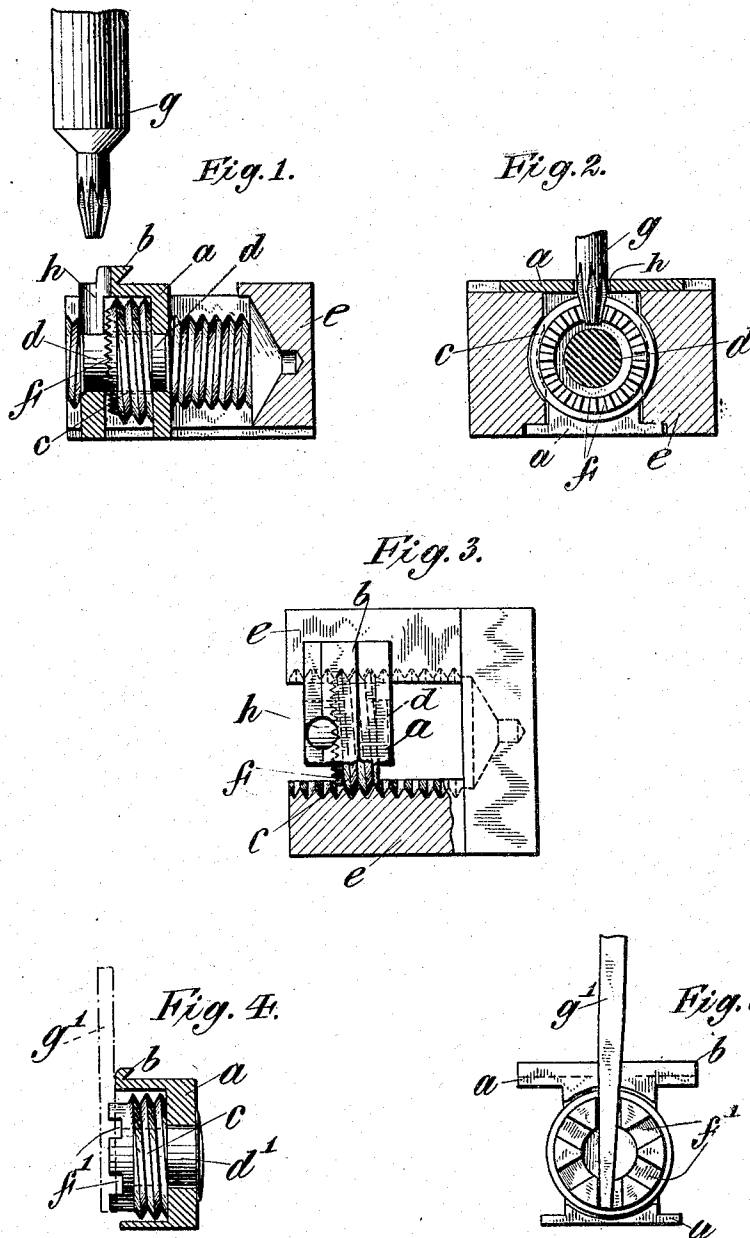


F. W. WESTON.
REGISTER HOOK.
APPLICATION FILED SEPT. 12, 1908.

930,582.

Patented Aug. 10, 1909.



Witnesses:
Joseph W. Weston
John A. Simon

John William Weston Inventor
By his Attorneys
Ludwig Wendel & Son

UNITED STATES PATENT OFFICE.

FOLKE WILLIAM WESTON, OF NEW YORK, N. Y., ASSIGNOR TO F. WESEL MANUFACTURING COMPANY, OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK.

REGISTER-HOOK.

No. 930,582.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed September 12, 1908. Serial No. 452,789.

To all whom it may concern:

Be it known that I, FOLKE WILLIAM WESTON, a citizen of the United States, and a resident of the borough of Brooklyn of the city of New York, in the State of New York, have invented certain new and useful Improvements in Register-Hooks, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

The invention relates to what are known in the printing art as "register hooks" which are employed in multiple-color and register work for the purpose of securing and adjusting electrotype plates and the like in the make-up or form of which they constitute a part. In such work, it is a matter of no small difficulty, with the ordinary hooks which the printer has at hand, to fasten the plates in the form in the precise position which they should occupy to bring the impression in the exact place required, any slight variation of a plate to one side or the other absolutely spoiling the effect of the printing. It is obviously necessary for the printer to have some means for effecting a proper adjustment of the plates in the form and it is extremely desirable that these means be such that the adjustments can be made with great accuracy and without involving several trials or any great expenditure of time upon the part of the printer.

One of the objects of the present invention has been to provide a register hook through which this end could be attained.

Another object of the invention has been to provide a hook of this character with as few component parts as possible, or in other words to provide a hook which shall not be complicated in its structure, and therefore liable to get out of order, or expensive to make.

Still another object of the invention is to provide a hook in which different forms of clamping members may be employed whereby the clamping members are interchangeable and when broken or injured may be replaced by others of the same kind or of a different kind.

In the drawings where a practical embodiment of the invention has been illustrated, Figure 1 is a view in longitudinal central section, the end of the tool for adjusting the clamp being shown in elevation just above the same. Fig. 2 is a view in transverse section, showing the tool in operative position.

Fig. 3 is a plan view, partly broken away for convenience in illustrating, and, Fig. 4 is a sectional view and Fig. 5 an end view of a different form of clamping member from that illustrated in Figs. 1 to 3.

The present hook belongs to that type of register hook in which the means engaging the clamping member in order to advance or retract the same is movable with said member.

As shown in the drawings, the clamping member *a*, which is provided with a jaw *b* formed integral therewith for the purpose of directly engaging the plate to be fastened, is provided with a screw *c* to advance the same, such screw being provided with bearings *d* at each end thereof which are suitably journaled in the body of the clamping member. The base of the hook is in the form of a yoke and the side members *e* of the base are provided internally with broken portions of a thread which is of a suitable size for the screw *c* to engage. Thus, the latter, as will be seen, engages the base at each side and is advanced or retracted in the direction of its axis.

Heretofore in register hooks of the present type screws have been provided, having their axes oblique or normal to the direction of travel, and this has generally required the interposition of intermediate gears or screws between such screws and the bases of the hooks. The present construction enables such gears and the like to be dispensed with and provides a most satisfactory engagement between the clamping member and base. Moreover, in accordance with the present construction, by retracting the clamp sufficiently, it may be removed entirely from the base at the open end thereof between the side members *e*, and another clamping member may be inserted, either of the same kind or of a different kind.

The clamping member illustrated in Figs. 1 to 3 inclusive is substantially I-shape in cross section (Fig. 2) being extended at the top and bottom toward the sides and thus being adapted to travel upon the upper and under sides of the side members *e* of the base. This clamping member is provided with a set of teeth *f* which constitute a sort of bevel gear upon the periphery of its rear face and this gear is adapted to be engaged by another bevel gear formed upon the end of a tool *g*. For the purpose of permitting this engagement, the clamping member is

formed with a hole *h* through which the end of the tool may be inserted, the walls about the hole serving to constitute a bearing for the bevel gear upon the end of the tool while it is in operative position and in mesh with the gear *f*. By twisting the tool *g* between the fingers, the screw *c* may be rotated and the clamping member *a* advanced or retracted with a very fine movement, whereby, as will be obvious, a very delicate and precise adjustment of a plate may be had.

The clamping member shown in Figs. 4 and 5 is also substantially I-shape in cross section, but instead of providing a bearing *d* at both the front and the rear of the screw *c*, it is supported entirely by the bearing *d'* at the front end thereof. And instead of providing teeth upon the rear face thereof, the latter is provided with a plurality of radial grooves *f'* through which a tool *g'* such as is illustrated in Fig. 5, is adapted to be inserted for the purpose of rotating the screw. It will be obvious that such a clamping member may be provided in the place of the clamping member shown in Figs. 1 to 3 and that other clamping members differing from those shown in the present drawing may also be employed in the improved hook. Moreover, other departures may be made from the

embodiment of the invention as here shown and described without avoiding the spirit of the invention.

I claim as my invention:—

1. A register hook comprising a yoke-shaped base having side members solid throughout, and a clamp, said clamp being substantially I-shaped in cross section and thus adapted to travel upon the under and upper sides of the side members of the yoke and having a propelling screw journaled in the vertical member of the clamp and adapted to engage the side members of the yoke.

2. A register hook comprising a base, and a clamp movable therein and embodying a propelling screw provided with a bevel gear upon one of its faces adapted to fit a corresponding bevel gear upon a tool, the said clamp being formed with a hole into which the tool is inserted and through which a bearing for the tool is provided as it is rotated to move the clamp.

This specification signed and witnessed this 11th day of September, A. D., 1908.

FOLKE WILLIAM WESTON.

Signed in the presence of—

C. H. MERRITT,
LUCIUS E. VARNEY.