S. PIWONSKI.

PRINTER'S CHASE.

APPLICATION FILED MAY 26, 1915.

1,166,543.

Patented Jan. 4, 1916.

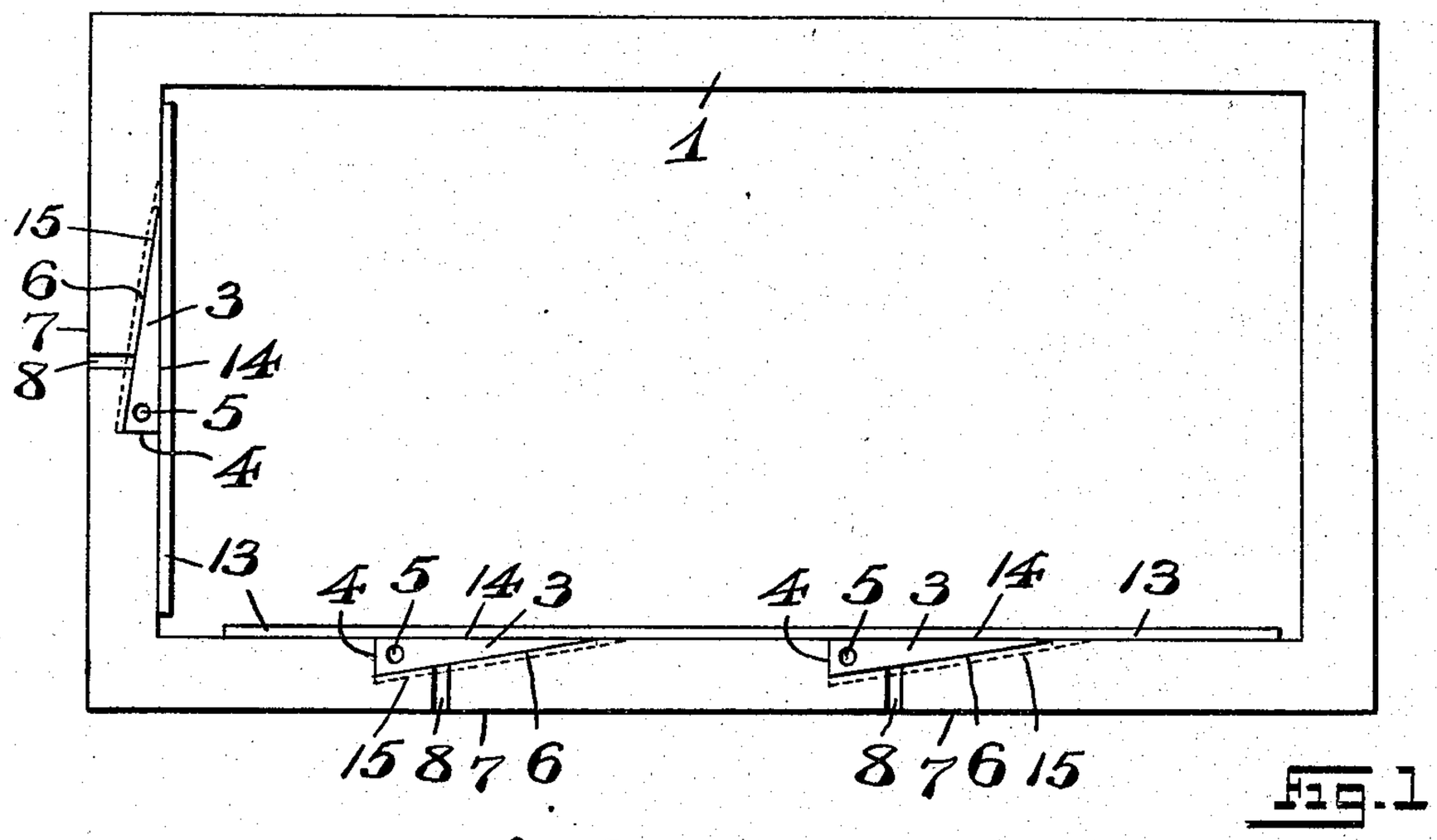

Fig. 1

Fig. 2.

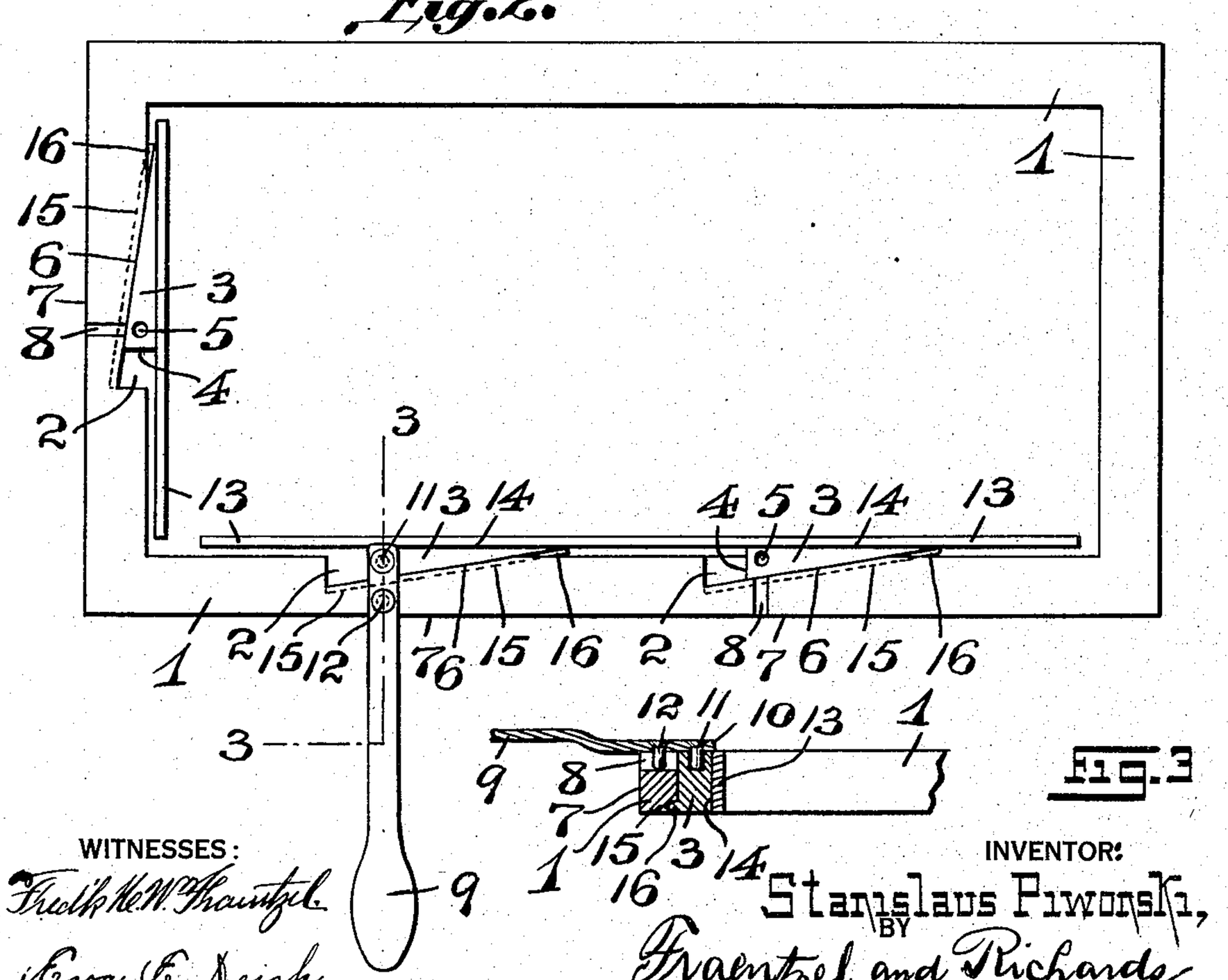

Fig. 3

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PRINTER'S CHASE.

1,166,543. Specification of Letters Patent. Patented Jan. 4, 1916.

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To all whom it may concern:

Be it known that I, STANISLAUS PIWONSKI, a subject of the Emperor of Austria-Hungary, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Printers' Chases; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The present invention relates, generally, to improvements in printers' chases; and, this invention has reference, more particularly, to a printer's chase provided with a novel quoin-operating and retaining means for easily and quickly fixing the printing type or plates in their fixed relation within the chase ready for use in printing.

The present invention has for its principal object to provide in connection with the frame of a chase, a novel means for readily operating the clamping or holding quoins of the frame, and a novel means for retaining the quoins in their fixed relation, after having been operated or adjusted, so as to securely hold the printing type or plates in their operative relation within the chase against accidental displacement therefrom, and furthermore, to prevent the quoins from shaking loose, due to excessive vibration and shocks, when printing, and while the chase is placed upon the printing plate or platen of the printing machine.

Other objects of this invention not at this time more particularly enumerated will be clearly understood from the following detailed description of the present invention.

With the various objects of the present invention in view, the said invention consists, primarily, in the novel printer's chase hereinafter set forth; and, the invention consists, furthermore, in the novel arrangements and combinations of the several devices and parts, as well as in the details of the construction of the same, all of which will be more fully described in the following specification, and then finally embodied in the clauses of the claim which are appended to and which form an essential part of the said specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a plan view of a printer's chase provided with a pair of quoins, all made according to and embodying the principles of the present invention, the quoins being shown in their normal initial positions, when the chase is not in use. Fig. 2 is a similar view of the printer's chase and the quoins, the latter being represented in one of their adjusted relations, when clamping or holding the printing type or plates in position in the frame of the chase, the said type or plates, however, being omitted from said view; and Fig. 3 is a detail transverse vertical section, taken on line 3—3 in said Fig. 2, looking in the direction of the arrow *x*.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the several figures of the drawings, the reference-character 1 indicates the rectangular frame of a printer's chase, the same being provided in at least two of its sides, and at the inner marginal edge-portions thereof, so as to communicate with the inner open part of the frame, with triangularly shaped cut-away portions or depressions 2. Slidably disposed within each cut-away portion or depression is a wedge-shaped quoin, as 3, the quoins being provided near their large end-portions 4 with pin-receiving sockets 5. Extending from the angular edge-portion 6 of each cut-away portion or depression 2, and approximately at right angles to the outer marginal edge-portions 7 of the chase-frame 1 are suitably formed pin-receiving grooves or slots 8, the purposes of which will be presently more fully described.

The reference-character 9 indicates a suitable operating lever or handle which is provided at its end-portion 10 with a pair of downwardly extending pins or lugs 11 and 12.

In operating the device, a wedge-shaped quoin is arranged in each cut-away portion or depression 2, in the manner illustrated in the figures of the drawings, and the type or plates having been arranged in the chase-

frame, suitable bars or plates, as 13, are placed in the frame between the said type or plates and the straight surface-portions 14 of the wedge-shaped quoins 3, the latter being in the positions indicated in Fig. 1 of the drawings. The respective pins or lugs 11 and 13 of the levers or handles 9 are now inserted in the respective pin-receiving sockets 5 of the quoins and the pin-receiving grooves or slots 8 of the chase-frame, and by the proper manipulation of the said levers or handles, the wedge-shaped quoins are moved from their normal initial positions represented in Fig. 1 of the drawings to the positions indicated in Fig. 2, as will be clearly evident, and whereby the bars or plates 13 are moved in inward directions against the printing type or plates set up in the chase-frame, so that the said printing type or plate will be properly clamped or locked in place, against accidental displacement and ready for use. As shown in said Figs. 1 and 2 of the drawings, the said triangularly shaped cut-away portions or depressions in the respective longitudinally extending side-members and the laterally extending end-members of the chase-frame, and the corresponding quoins located in said cut-away portions or depressions extend in opposite directions, so that the quoins, when operated, are moved in opposite directions, to thereby provide a more positively clamped relation of the printing type or plates within the chase. It will also be seen that the respective longitudinally extending side-members and the laterally extending end-members of the chase-frames, at the points where said members are provided with the quoin-receiving depressions, are cut-away or recessed to provide channels, as at 15, the quoins being provided with correspondingly formed rib-like members or tongues, as at 16, which register with and are slidably disposed in the said cut-away or recessed parts 15. The purpose of these registering parts is to positively retain the quoins in place, after adjustment has been made, to prevent the shaking loose of the quoins, due to excessive vibrations or shocks when the printer's chase, with the printing type or plates clamped in place, is placed upon the printing table or platen of the printing machine, as will be clearly evident.

Of course, I am aware that some changes may be made in the general arrangements and combinations of the devices and parts, as well as in the details of the construction of the same, without departing from the scope of the present invention as set forth in the foregoing specification, and as defined in the clauses of the claim which are appended thereto. Hence, I do not limit my present invention to the exact arrangements and combinations of the various devices and parts, as described in the said specification, nor do I confine myself to the exact details of the construction of the said parts as illustrated in the accompanying drawings.

I claim:—

1. A printer's chase comprising a frame, said frame being formed in the inner marginal portion of one of its sides with a quoin-receiving cut-away portion or depression, a wedge-shaped quoin slidably disposed in said quoin-receiving cut-away portion or depression, and the said side of the frame and the said quoin being provided with registering members to prevent displacement of the quoin, substantially as and for the purpose set forth.

2. A printer's chase comprising a frame, said frame being formed in the inner marginal portion of one of its sides with a quoin-receiving cut-away portion or a depression, a wedge-shaped quoin slidably disposed in said quoin-receiving cut-away portion or depression, the said side of the frame being provided at the point of said quoin-receiving cut-away portion with a channel, and a rib-like member or tongue extending from said quoin and in registration with said channel, substantially as and for the purposes set forth.

3. A printer's chase comprising a frame, said frame being formed in the inner marginal portion of one of its sides with a quoin-receiving cut-away portion or a depression, a wedge-shaped quoin slidably disposed in said quoin-receiving cut-away portion or depression, and the said side of the frame and the said quoin being provided with registering members to prevent displacement of the quoin, the said quoin being provided with a pin-receiving socket and the frame being provided with a pin-receiving groove for the reception of pins extending from a manipulating lever, substantially as and for the purposes set forth.

4. A printer's chase comprising a frame, said frame being formed in the inner marginal portion of one of its sides with a quoin-receiving cut-away portion or depression, a wedge-shaped quoin slidably disposed in said quoin-receiving cut-away portion or depression, the said side of the frame being provided at the point of said quoin-receiving cut-away portion with a channel, and a rib-like member or tongue extending from said quoin and in registration with said channel, the said quoin being provided with a pin-receiving socket and the frame being provided with a pin-receiving groove for the reception of pins extending from a manipulating lever, substantially as and for the purposes set forth.

5. A printer's chase consisting of an open frame comprising longitudinally extending side-members and laterally extending end-members, one of said side-members and one of said end-members being provided in

their inner marginal portions with quoin-receiving cut-away portions or depressions of triangular conformation, triangularly shaped quoins slidably disposed in said quoin-receiving cut-away portions or depressions, the said cut-away portions or depressions and the said quoins being disposed in opposing directions, and means detachably connected with said quoins for sliding said quoins in said opposing directions, substantially as and for the purposes set forth.

6. A printer's chase consisting of an open frame comprising longitudinally extending side-members and laterally extending end-members, one of said side-members and one of said end-members being provided in their inner marginal portions with quoin-receiving cut-away portions or depressions of triangular conformation, triangularly shaped quoins slidably disposed in said quoin-receiving cut-away portions or depressions, the said cut-away portions or depressions and the said quoins being disposed in opposing directions, said quoins being provided with pin-receiving sockets, and the frame being provided with pin-receiving grooves for the reception of pins extending from a manipulating lever for sliding said quoins in said opposing directions, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 21st day of May, 1915.

STANISLAUS PIWONSKI.

Witnesses:
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FRED'K H. W. FRAENTZEL.