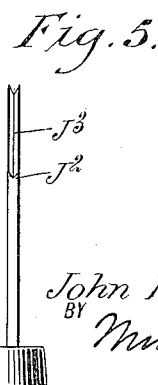
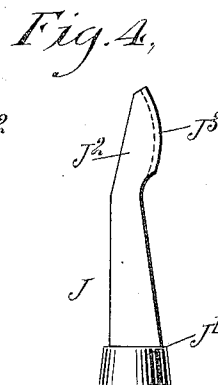
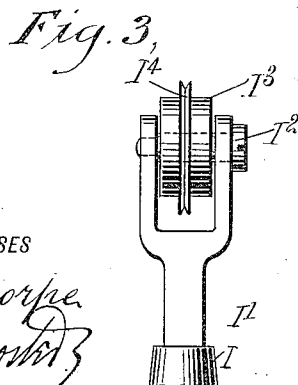
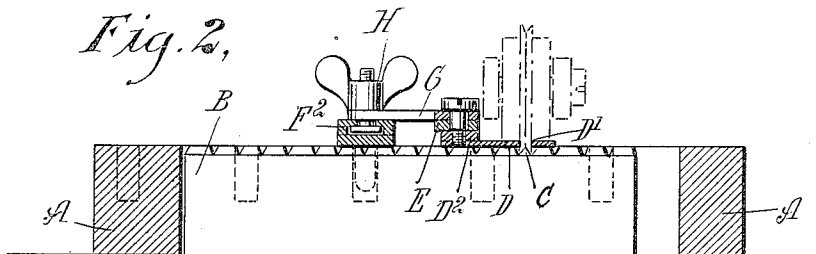
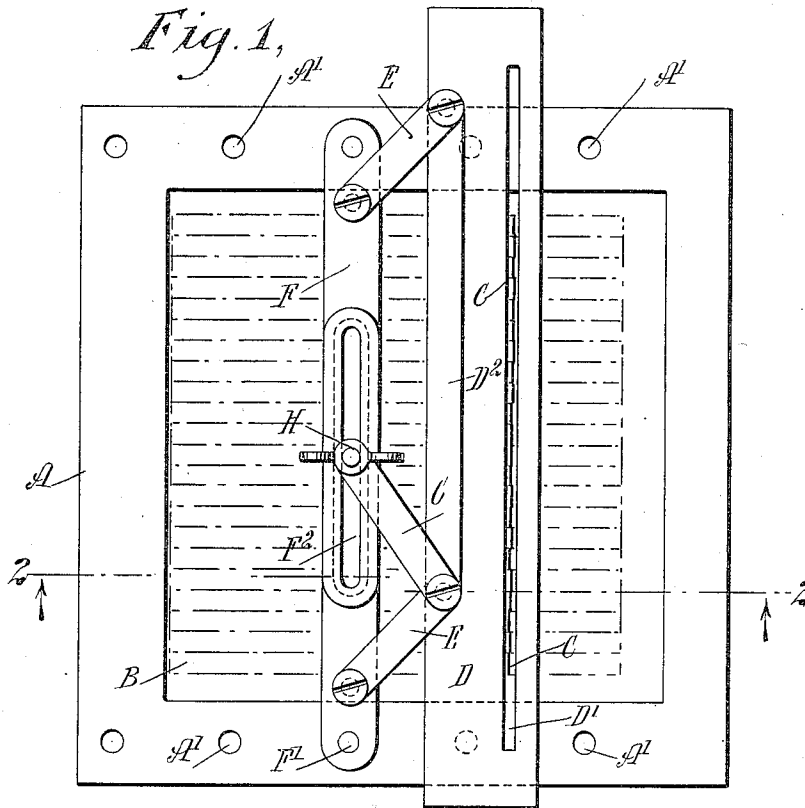


J. H. W. KNOOP.
RECTIFYING DEVICE.
APPLICATION FILED JAN. 24, 1912.

1,045,566.

Patented Nov. 26, 1912.



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RECTIFYING DEVICE.

1,045,566.

Specification of Letters Patent.

Patented Nov. 26, 1912.

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To all whom it may concern:

Be it known that I, JOHN HENRY WILLIAM KNOOP, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Rectifying Device, of which the following is a full, clear, and exact description.

The invention relates to the rules in tabular and similar matter produced by line of type producing machines, and its object is to provide a new and improved rectifying device arranged to enable an operator to bring into perfect alinement the rules of such tabular matter.

For the purpose mentioned use is made of a slotted guide adapted to be adjusted to register with the rules on the type or type bars, and a tool guided by said guide and adapted to engage the said rule and to move the latter sidewise into register one with the other, with a view to form a straight line.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the rectifying device as applied; Fig. 2 is a side elevation of the same on the line 2—2 of Fig. 1; Fig. 3 is a plan view of the rectifying tool; Fig. 4 is a side elevation of a modified form of rectifying tool; and Fig. 5 is an edge view of the same.

In doing tabular work on line of type producing machines it is practically impossible to place the rule matrix into such a position as to produce rules on the type or type bars that will aline perfectly with the rule in the line above and below, and in order to move the rules of the type or type bars forming such tabular matter into proper alinement one with the other use is made of a rectifying device presently to be described in detail.

A type high frame A is adapted to contain the type or type bars B, on which the rules C (usually out of alinement, as indicated in Fig. 1) are to be rectified. A guide D extends across the top of the frame A and is provided with a transverse slot D' adapted to register with the rules C, as indicated in Fig. 1, and on one side of the guide D is arranged a ridge D² pivotally

connected by links E with a transverse supporting bar F provided at its ends with pins F' adapted to engage corresponding pairs of apertures A' arranged on the upper and lower ends of the frame A.

By the arrangement described the bar F can be adjusted on the frame A to move the guide D into proper position relative to a desired line of rules C, it being understood that the bar F is engaged by its pins F' with a pair of apertures A' so as to locate the guide D with its slot D' in close proximity to the line of rules C, the operator on swinging the links E being enabled to move the guide D to final position with the slot D' in register with the line of rules C. A locking link G connects the guide D with the bar F by the use of a clamping screw H engaging a transverse slot F² arranged in the supporting bar F, it being understood that when adjusting the guide D the clamping screw H is loose and free to slide in the slot F², and when the guide D has been moved into the desired position, as above explained, then the operator tightens the screw H to clamp the locking link G in place, thus holding the guide D fixed in the adjusted position.

A rectifying tool I' or a rectifying tool J is engaged with the slot D' of the guide D so as also to engage the rules C and move the same sidewise into alined position. The rectifying tool shown in Fig. 3 (see also dotted lines in Fig. 2) consists of a handle I provided with a forked end containing a stud I² on which is mounted to turn a roller I³ provided with an annular rib I⁴ having a groove in its peripheral face. The roller I³ is adapted to travel on the top surface of the guide D while the rib I⁴ extends in the slot D' and on now pushing the roller transversely over the guide D, the grooved rib I⁴ engages the upper or printing faces of the rules C and moves the same sidewise into perfect transverse alinement one with the other. The rectifying tool, shown in Fig. 4, is provided with a handle J' and a head J² having a segmental face provided with a groove J³, and the head J² is adapted to be passed into the slot D' so that the groove J³ engages the upper faces of the rules C and shifts the same into transverse alinement with each other on pushing the tool across in the slot D'. Thus it will be seen that by the use of either the tool I or J

the irregularly-arranged rules are moved in transverse alinement one with the other to form a straight line.

It is understood that the width of the rib I⁴ and the head J² corresponds approximately to the width of the groove D' so as to insure a proper transverse guiding of the tool on the guide D for rectifying the imperfect line of rules C.

In case a rule C extends above the printing surface of the type bars B such rule is pressed down when using the tool I' or J until the printing face of such rule is level with the printing surface of the type bars B.

In practice, I have found that it is desirable to make the rule matrix slightly deeper in order to produce rules that would extend above the printing surface before being corrected or straightened, and to rely upon the tool I' or J to depress this higher rule to the level of the printing surface of the type.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a rectifying device for rules in tabular matter, a frame, a member adjustably mounted on the frame, a guide along which a tool is adapted to be moved to move the rules in alinement, and means for adjustably connecting the guide with said member.

2. In a rectifying device for rules in tabular matter, a frame, a member mounted on the frame, a slotted guide, in the slot of which a tool is adapted to be moved to move the rules in alinement, and means for adjustably connecting the guide with said member.

3. In a rectifying device for rules in tabular matter, a frame, a slotted guide, in the slot of which a tool is adapted to be moved to move the rules in alinement, and means for adjustably mounting the guide on the frame.

4. In a rectifying device for the rules in tabular matter, a frame, a guide along which a tool is adapted to be moved to move the rules in alinement, and means for adjustably mounting the guide on the frame.

5. In a rectifying device for the rules in tabular matter, a frame, a guide along which a tool is adapted to be moved to move the rules in alinement, a member adjustably mounted on the frame, a link connection between the member and guide, and means for locking the guide in position with respect to the said member.

6. In a rectifying device for the rules in tabular matter, a frame, a slotted guide, in the slot of which a tool is adapted to be moved to engage the rules and move them in alinement, a slotted bar adjustably mounted on the frame, links connecting the bar with the guide, a link having one end pivoted to the guide, and a screw engaging the other end of the link and working in the slot of said bar.

7. A rectifying device for the rules in tabular matter, comprising a member adapted to be secured to a type frame, a slotted guide, in the slot of which a tool is adapted to be moved to move the rules in alinement, means connecting the guide with the member, whereby the guide may be moved toward and from said member, and means for locking the guide in the position to which it has been moved.

8. A rectifying device for the rules in tabular matter, comprising a member provided at its ends with means whereby it may be made to engage a type frame to hold it thereon, a slotted guide, in the slot of which a tool is adapted to be moved to move the rules in alinement, links connecting the guide with said member, and a link having its ends pivotally connected with the guide and member, one of the pivotal connections being adjustable with respect to the part to which it is connected.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN HENRY WILLIAM KNOOP.

Witnesses:

G. W. SLOAN,
THEO. H. McCALLA.