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O. C. OSTERHOLM & J. B. EASTMAN.

GAGE PIN FOR PLATEN PRESSES.

APPLICATION FILED JUNE 5, 1906.

Fig. 1.

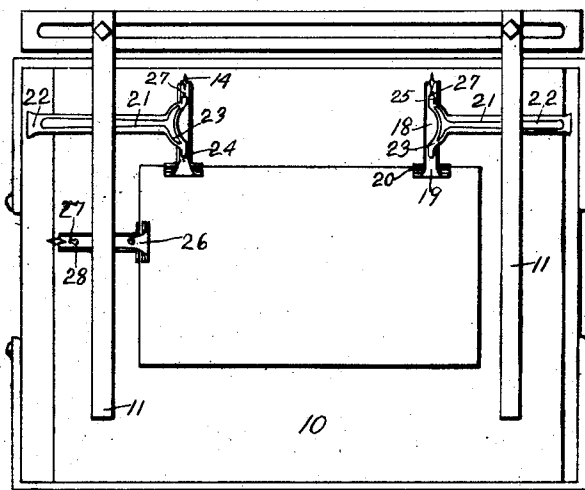


Fig. 2.

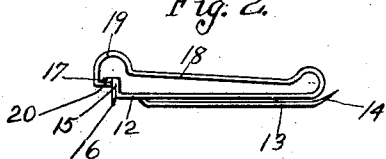


Fig. 4.

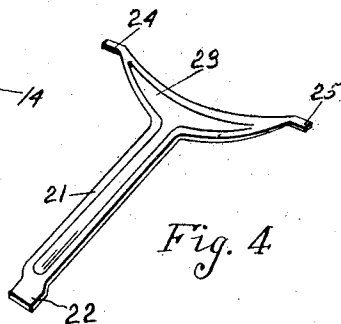
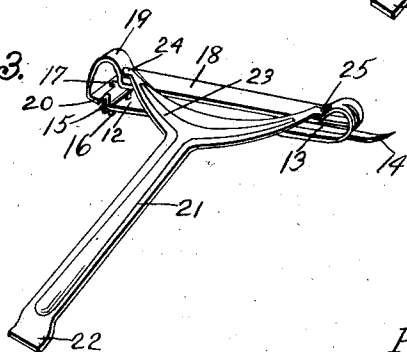


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

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GAGE-PIN FOR PLATEN-PRESSES.

No. 854,106.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed June 5, 1906. Serial No. 320,911.

To all whom it may concern:

Be it known that we, OSCAR C. OSTERHOLM and JOHN B. EASTMAN, citizens of the United States, residing at Clarinda, in the county of Page and State of Iowa, have invented a certain new and useful Gage-Pin for Platen-Presses, of which the following is a specification.

Our object is to provide a gage pin of simple, durable and inexpensive construction that may be quickly and easily attached to the tympan sheet of a press to form a gage against which the sheets to be printed on may be placed to determine their position with relation to the tympan.

A further object is to provide a gage pin of this class with a gripping device designed to automatically engage the sheet to be printed and hold it to position adjacent to the tympan sheet, until after the type of the press have been removed from the sheet.

A further object is to provide an auxiliary arm arranged for detachable connection with the gripping member of the gage pin, whereby the gage pins at the end of the tympan sheet may be actuated in unison with those at the sides thereof, to grip the sheet being printed.

Our invention consists in the construction of the gage pin and the construction, arrangement and combination therewith of the auxiliary arm, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a plan view of a tympan and gripper arms adjacent thereto and a number of gage pins embodying our invention applied to the tympan sheet, as in practical use. Fig. 2 shows an edge elevation of a gripper pin embodying our invention. Fig. 3 shows a perspective view of the same with an auxiliary arm attached to the gage pin, and Fig. 4 shows a detail, perspective view of one end of an auxiliary arm to illustrate the construction thereof.

Referring to the accompanying drawings, we have used the reference numeral 10 to indicate the tympan and 11 the gripper arms in position projecting over the tympan. These parts are of the ordinary construction and form no part of our present invention, it being understood that the said gripper arms move toward and from the tympan during

each impression made by the type on the sheet to be printed on.

Our improved gage pin is preferably formed complete of a single piece of sheet metal and comprises a body portion or base 12 with a pin 13 formed in its center by being cut from the material of which the base is formed. This pin is extended below the base and provided with a point 14. It is designed to pass through the tympan sheet and hold the gage pin firmly in position thereon. At the end of the base 12 is an upright portion 15 with a flat front face and with downwardly projecting points 16 on its lower edge. Near its upper edge is a forwardly projecting lug 17. At the other end of the base 12, I have formed the gripping device which extends over the top of the base and is spaced apart from it and comprises a body portion 18, an arched end 19 which extends downwardly below the lug 17 and an inwardly projecting end 20, which extends under the lug 17. The metal of which the gage pin is formed is resilient or springing and the gripping device is normally held in an elevated position, as shown in Fig. 2.

The auxiliary arm for the gripper comprises a straight body portion 21 with one end inclined downwardly at 22 and the other end forked at 23 and provided with one flat end 24 and one flat end 25. The gripper 18 is formed with a round opening 26 in the loop 19 to receive either of said ends 24 and 25 and with a slot 27 near its other end, said slot having a widened portion 28 designed to receive either of said ends 24 and 25. We connect the arm 21 with the gripper as follows: The said arm is placed in a vertical position and one of the ends is inserted through the round opening 26, then the other end 25 is inserted through the slot 27, then the arm 21 is lowered to a horizontal position and the end in the slot 27 is retained wholly within the rounded portion 28 of the slot so that it cannot be detached from the gripper until the arm 21 is moved to a vertical position. The arm may be made to project laterally from either side of the pin.

In practical use and assuming the parts to be arranged as shown in Fig. 1, and assuming further that the gripper arms 11 are out of engagement with the gage pins, then a sheet of paper to be printed on may be placed on the tympan and guided to position by the flat faces 15 of the gage pins. The lugs 17

will prevent the edges of the papers from curving upwardly and passing over the part 15. Then when the gripper arms 11 are brought into engagement with the gripper 18, the end 20 of said gripper will engage the sheet and firmly hold it to the tympan so that the sheet will not stick to the type from which the printing is being done. Furthermore the gage pins at the ends of the tympan 10 will also have their grippers actuated, because the gripper bars 11 will strike upon the central portions of the arms 21, so that the grippers of these gage pins will work in unison with those of the gage pins at the sides 15 of the sheets that are engaged by the gripper arms 11.

Having thus described our invention, what we claim and desire to secure by Letters Patent of the United States, therefor is—

20 1. An improved gage pin, comprising a body portion, a pin connected therewith, an upright part at one end of the body portion, a lug projecting from said upright part and a spring gripper projecting in front of the 25 face of said upright part and below said lug and normally elevated and also capable of being depressed to engage a sheet of paper in front of said upright part.

2. An improved gage pin, formed complete of a single piece of sheet metal, and comprising a flat body portion, a pin formed integral with the body portion, a flat upright face at one end of said body portion, a sharpened projection at the lower edge thereof and 30 a lug projecting forwardly from the upper edge thereof and a gripper formed on the other end of said body portion extended over the top of said body portion and formed with an arch above the upright plate of the body

portion and having a rearwardly projecting extension on its lower edge, under the lug at the top of the upright plate, said gripper normally held by the resiliency of the metal in an elevated position. 40

3. An improved gage pin, formed complete of a single piece of sheet metal and comprising a flat body portion, a pin formed integral with the body portion, a flat upright face at one end of said body portion, a sharpened projection at the lower edge thereof, a lug 50 projecting forwardly from the upper edge thereof, a gripper formed on the other end of said body portion extended over the top of said body portion and formed with an arch above the upright plate of the body portion 55 and having a rearwardly projecting extension on its lower edge under the lug at the top of the upright plate, said gripper normally held by the resiliency of the metal in an elevated position, and an auxiliary gripper arm detachably connected with the gripper to extend laterally therefrom. 60

4. The combination with a gage pin, of a normally elevated gripper having openings in its end portions and a gripper arm comprising a straight body portion with a downwardly inclined extension at one end, a fork at its other end, the ends of said fork designed to be inserted in said openings when the arm is in an upright position and to be 70 held in said openings when the arm is in its lowered position.

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Witnesses:

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