

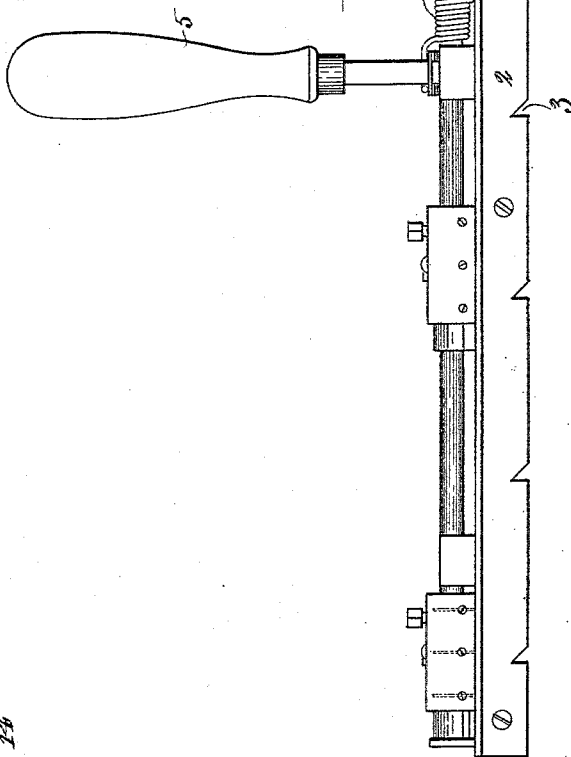
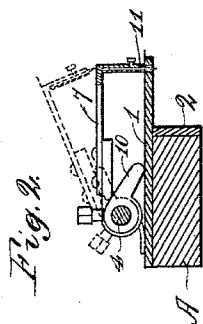
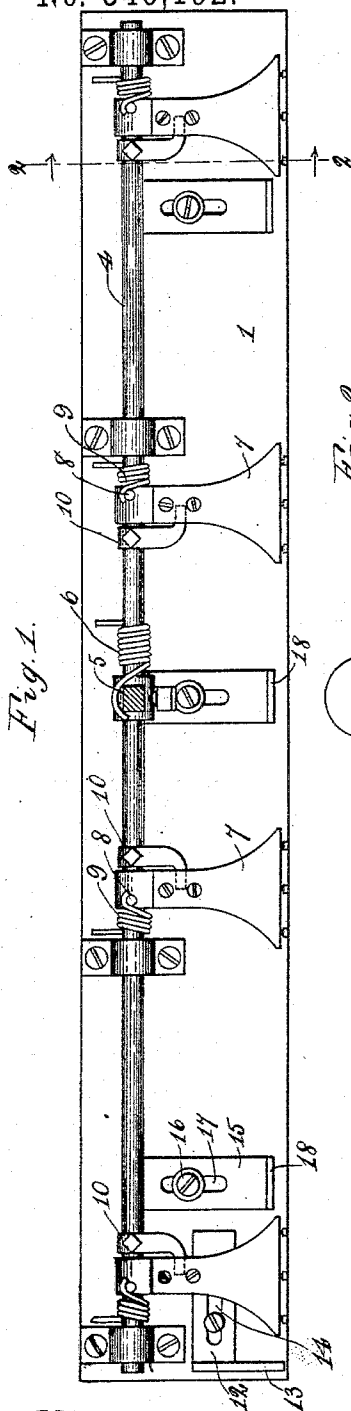
(No Model.)

2 Sheets—Sheet 1.

M. B. SCHNAUDER.
PAPER HOLDING CLAMP.

No. 546,192.

Patented Sept. 10, 1895.



Witnesses:

Rudolph W. Lutz
Arthur E. Lutz

Inventor:

Maurice B. Schnauder

By Henry Cobb Kennedy.

Attorney.

(No Model.)

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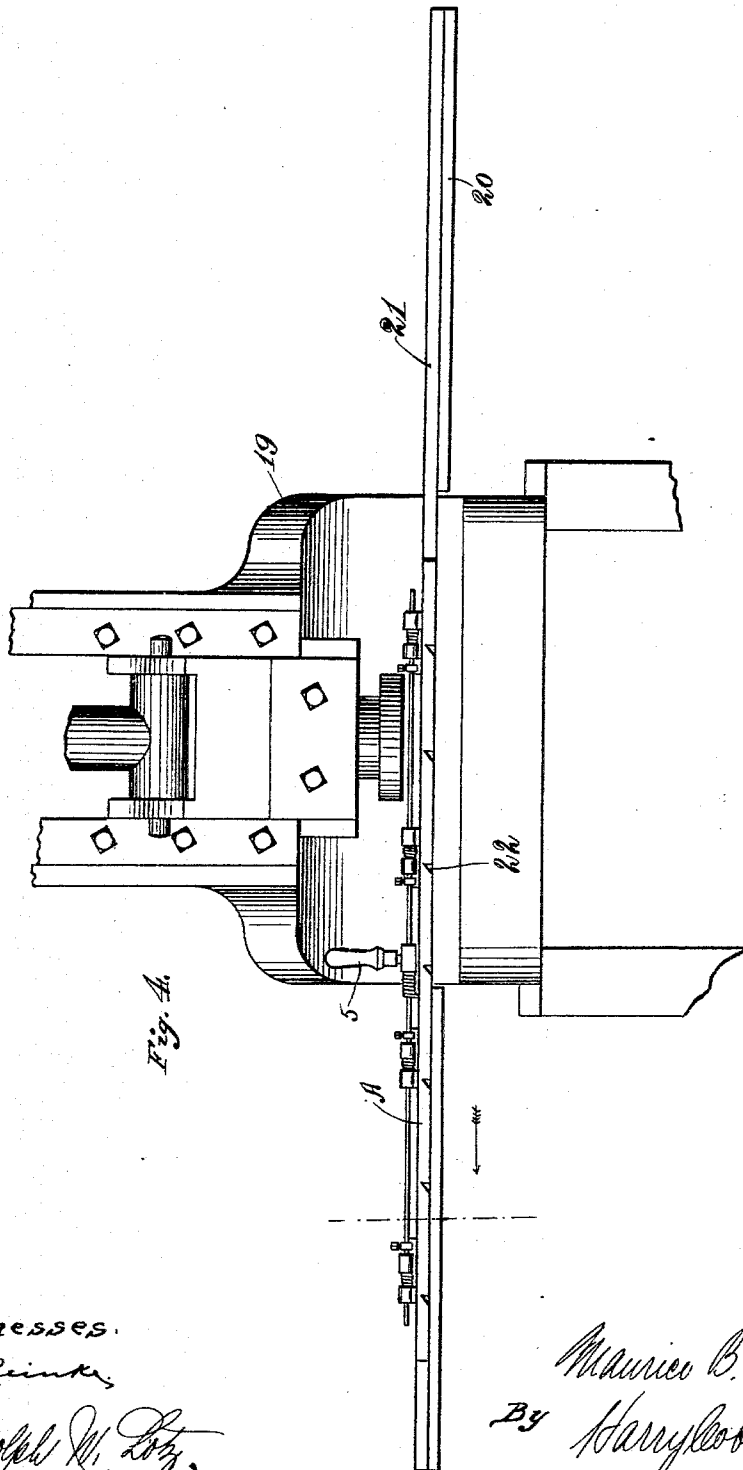


Fig. 4.

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UNITED STATES PATENT OFFICE.

MAURICE B. SCHNAUDER, OF CHICAGO, ILLINOIS.

PAPER-HOLDING CLAMP.

SPECIFICATION forming part of Letters Patent No. 546,192, dated September 10, 1895.

Application filed April 30, 1894. Serial No. 509,616. (No model.)

To all whom it may concern:

Be it known that I, MAURICE B. SCHNAUDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Clamps; 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.

This invention relates to a novel construction in a clamp to be employed by lithographers to hold paper figures designed to be cut out in a press, of the kind ordinarily used by sheet-metal workers.

The object of this invention is to supply a clamp which will eliminate the danger ordinarily present in using a press of the kind specified, and will be of simple and durable construction and efficiency; and it consists in the features of construction and combinations of parts hereinafter fully described and specifically claimed.

In the accompanying drawings illustrating my invention, Figure 1 is a top plan view of a clamp constructed in accordance with my invention. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 1. Fig. 3 is a front elevation of the same. Fig. 4 is a front elevation of a sheet-metal press with my clamp in place thereon.

Referring now to said drawings, A indicates the body portion or base of the clamp, which preferably consists of a solid strip of wood or other material, to the top of which an iron plate 1 is secured, the rear end of which is flush with one side of the said strip A and the forward end of which projects beyond the other side of the strip. To the forward end of the strip A an iron strip 2 is secured, the lower end of which is flush with the bottom of the strip A. Secured in bearings upon the said plate 1 is a shaft 4, which is provided about its middle portion with an upright handle-bar 5 adjustably secured thereto. Encircling said shaft 4 and adjacent said handle-bar 5 is a spring 6, one end of which engages said handle-bar at the rear end portion thereof, and the other end of which presses upon the plate 1 in the rear of the said shaft 4. Said spring tends to press said handle-bar 5 forward and hold it in the position shown in full lines in Fig. 3. Pivoted upon the said shaft 4, at intervals, are jaws 7. Said jaws 7

are normally held against the plate 1 under yielding pressure conveniently obtained by coiled springs 9 situated upon the shaft 4, and bearing at their opposite ends against projections 8 upon said arms 7 and against the plate 1. Said jaws 7 are held down upon the plate 1 by means of said springs 9, and to raise said jaws 7 when it is desired to release the paper or other material held thereby I secure arms 10, having bent ends, rigidly to the shaft 4 adjacent said arms 7 on the sides opposite to the springs 9, which engage the under faces of said jaws 7 and serve to raise the same when the handle-bar 5 is turned to the rear. Said jaws 7 are provided at their forward ends with pins 11 adjustably secured in openings in said jaws. Said pins 11 are provided with sharp points which enter small perforations in the plate 1 near the edge of said plate. Obviously, said pins 11 will pierce the paper held between said jaws 7 and plate 1 and serve to hold the same more securely. The construction and arrangement of the clamping-jaws herein shown and described could, obviously, be altered without departing from the spirit of my invention, which consists chiefly in the devices for adjusting the position of the material to be held by the clamp, both with reference to the clamping-jaws and with reference to the die on the press, as hereinafter more fully described.

At one end of the plate 1, I secure a stop or guide 12, consisting of a slotted plate having an upwardly-extending flange 13, which projects forwardly to a point near the forward edge of said plate 1 and serves as a stop for the material to be held by the jaws 7 when the same is placed in position. Said stop 12 is provided with a slot 14, through which a screw passes into the plate 1, and by means of which the position of said stop 12 can be adjusted. Between said jaws 7 guides or stops 15 are adjustably secured by means of screws 16 passing through slots 17 in said guides 15 into the plate 1. Said guides 15 are provided at their forward ends with upwardly-extending flanges 18, which prevent the material held by the jaws 7 from extending too far over the upper face of the clamp. The said stops or guides 12 and 15 obviously adjust the position of the material held in the clamp.

In Fig. 4 I have shown a sheet-metal-worker's press 19, which is provided with a table

20 upon which my clamp is adapted to slide. Said table 20 is provided with a shoulder 21, which is adapted to engage the front face of the strip 2 on said press to guide the clamp
 5 in its longitudinal movement on said table and limit its lateral movement. In this manner the distance which the material held by the clamp extends underneath the die is limited. Said table 20 is further provided with
 10 a lug 22, which engages notches 3, running transversely across the lower face of the clamp, and acts as a stop to limit the longitudinal movement of the clamp at regular intervals. In this manner the position of the material
 15 held by the clamp with reference to the die is adjusted, so that it will be cut in certain predetermined places.

Obviously, the above manner of constructing the stops could only be varied without departing from the spirit of my invention. In
 20 this manner I am enabled to cut a far larger quantity of material than by any of the methods at present in use, and for this reason can do this work very much cheaper. My device
 25 is also cheap and simple, and for this reason does not get out of order.

I claim as my invention—

1. The combination with a press having a stop to limit the lateral movement of a clamp
 30 and guide it longitudinally and a stop to limit the longitudinal movement of same, of a clamp provided with clamping jaws on its upper face, and stops adapted to coact with said stops on said press to adjust the position
 35 of the material held by said clamp with reference to the die so that the same will be cut at certain predetermined intervals, substantially as described.

2. The combination with a press having
 40 stops to limit the movement of a clamp in its lateral and longitudinal movement and to guide it longitudinally, of a clamp provided with clamping jaws on its upper face, and stops adapted to coact with said stops on said
 45 press to adjust the material held by said clamp with reference to the die, so that the same will be cut at certain predetermined intervals, substantially as described.

3. A clamp comprising a body portion, having adjustable guides or stops secured thereto, a shaft pivoted in bearings on said body
 50 portion and carrying a plurality of yielding jaws, and devices for turning said shaft and retracting said jaws, substantially as described.

4. A clamp comprising a body portion provided with stops on its lower face, stops or guides on its upper face to limit the inward
 60 extension of the material held in said clamp, and a stop or guide to limit the longitudinal movement of the same, substantially as described.

5. A clamp comprising a body portion provided with stops on its lower face, adjustable
 65 stops or guides on its upper face to limit the inward extension of the material held in said clamp and an adjustable stop or guide to limit

the longitudinal movement of the same, substantially as described.

6. A clamp comprising a body portion A
 70 having stops on its lower face, a shaft 4 pivoted upon said body portion, clamping jaws pivotally mounted upon said shaft, means for holding said jaws normally against said body
 75 portion, arms 10 secured to said shaft 4 and adapted to engage said jaws, means for holding said arms 10 normally out of engagement with said jaws, and means for turning said shaft, substantially as described.

7. A clamp comprising a body portion A
 80 having stops on its lower face, a shaft 4 pivoted in bearings on said body portion, jaws 7 pivoted upon said shaft, means for holding said jaws normally against said body portion, a handle-bar 5 secured to said shaft, arms 10
 85 secured to said shaft adjacent said jaws 7 and adapted to engage the same, and a spring engaging said shaft and adapted to hold said arms 10 at the lower limit of their movement, substantially as described.

8. A clamp comprising a body portion having stops on its lower face, a shaft 4 pivoted
 90 in bearings secured to said body, jaws pivoted upon said shaft 4, devices for raising and lowering said jaws, and adjustable stops or guides secured to said body portion, substantially as described.

9. A clamp comprising a body portion having stops on its lower face, a shaft 4 pivoted
 100 in bearings secured to said body portion, jaws provided with pins or projections at their forward ends pivoted upon said shaft 4, and devices for raising and lowering said jaws, substantially as described.

10. A clamp comprising a body portion having stops on its lower face, a shaft 4 pivoted
 105 in bearings secured to said body portion, jaws pivoted upon said shaft 4, devices for raising and lowering said jaws, and guides or stops 12 and 15 adjustably secured to said body portion, substantially as described.

11. A clamp comprising a body portion having stops on its lower face, a shaft 4 pivoted
 115 in bearings secured to said body portion, jaws 7 pivotally secured upon said shaft 4, arms 10 secured to said shaft 4 adjacent said jaws 7 and adapted to engage the same, a handle-bar 5 secured to said shaft and adapted to raise said arms 10, a spring 6 encircling said shaft adjacent said handle-bar 5 and engaging the
 120 same and adapted to keep said arms 10 at the lower limit of their movement, springs 9 encircling said shaft adjacent said jaws 7 adapted to engage the same and keep them at the lower limit of their movement, and guides or
 125 stops 12 and 15 adjustably secured to said plate 1 and provided with upwardly extending flanges, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MAURICE B. SCHNAUDER.

Witnesses:

RUDOLPH WM. LOTZ,
 HARRY COBB KENNEDY.