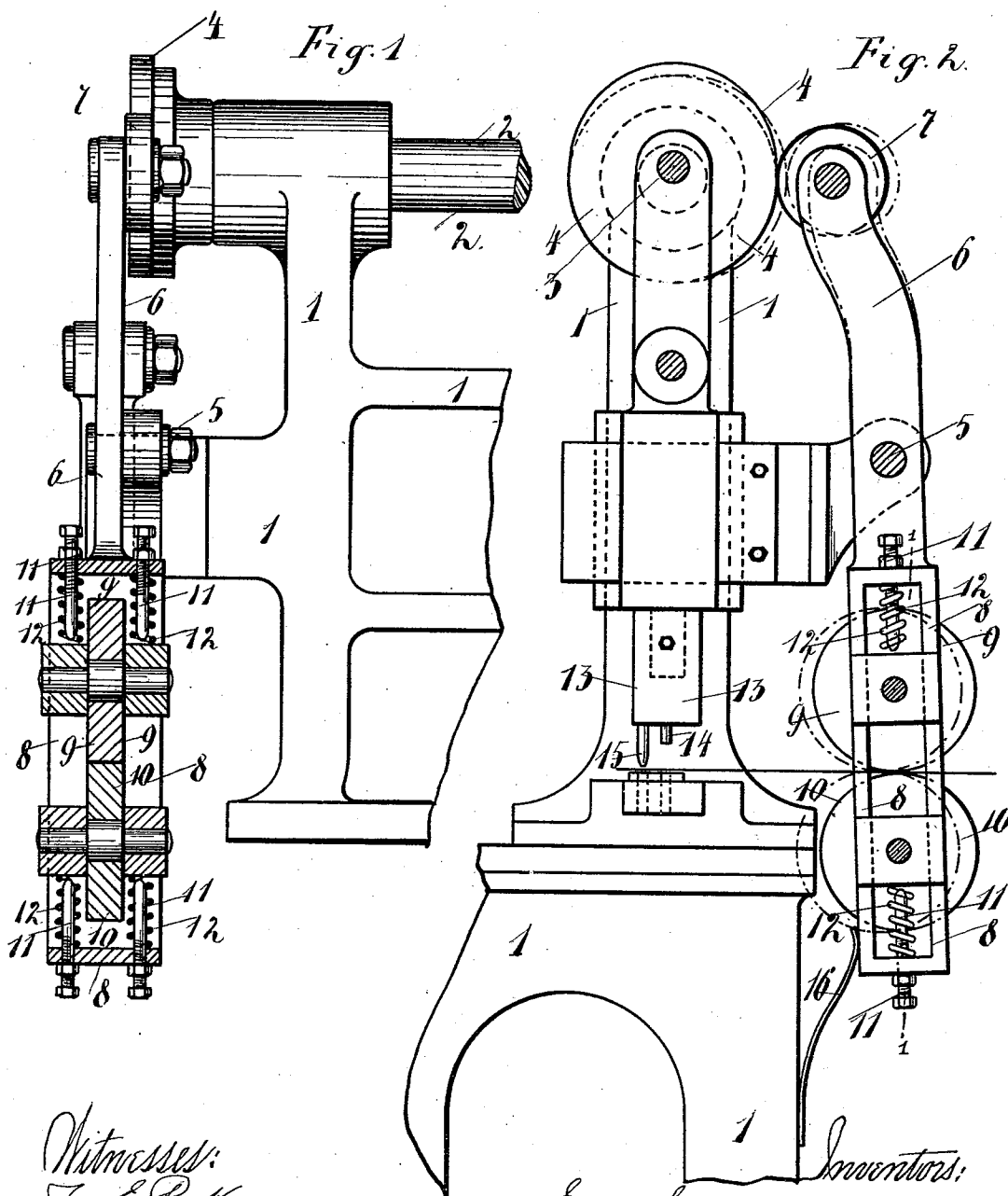


(No Model.)

E. SALTZKORN & L. NICOLAI.
STAMPING PUNCH.

No. 517,171.

Patented Mar. 27, 1894.



Witnesses:
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UNITED STATES PATENT OFFICE.

EMIL SALTZKORN AND LUDWIG NICOLAI, OF DRESDEN, GERMANY.

STAMPING-PUNCH.

SPECIFICATION forming part of Letters Patent No. 517,171, dated March 27, 1894.

Application filed November 26, 1893. Serial No. 491,951. (No model.)

To all whom it may concern:

Be it known that we, EMIL SALTZKORN and LUDWIG NICOLAI, subjects of the King of Saxony, residing in the city of Dresden, in the Kingdom of Saxony, German Empire, have invented certain new and useful Improvements in Stamping-Punches, of which the following is a specification.

The object of our invention is to provide a punching or similar press with a device for automatically feeding the material being acted upon to the punch and to insure an even and regular feed of such material and the holding of the same in proper position during the action of the punch.

In the accompanying drawings:—Figure 1 is a side elevation partially in section on the line 1—1 Fig. 2, and Fig. 2 is a front elevation of the same.

Referring to the drawings 1 represents a suitable supporting frame in the upper portion of which, in suitable bearings, is journaled a cam shaft, 2, on which is an eccentric, 3, adapted to operate the punch head 13, carrying as usual an interchangeable punch 14. The punch head also carries a spacing or guiding peg 15, longer than the punch, slightly pointed at its end, and adapted to engage in the perforations or indentations made in the metal by the punch. Pivoted to one side of the frame at 5, is a lever 6, the upper end of which is provided with an antifriction roller 7, held in contact with a cam 4, on the shaft 2, by a plate spring 16, secured to the frame. The lower end of the lever 6, is slotted at 8, to receive the journals of feed rolls 9 and 10 which journals are held between springs 12 encircling set bolts 11, so that the material to be punched may be clamped between the feed rolls 9 and 10 as the latter move forward to feed the strip to the punch.

In operation, as the shaft 2, revolves, the punch head 13, is slowly depressed and at the same time the cam 4, on the shaft 2, oscillates the lever 6, to move the feed rolls 9 and 10 toward the punch 14, to feed the material, the conical point of the spacing peg 15, entering the perforation or indentation previously formed by the punch and as the roller 7, leaves the high section of the cam 4, the spring 16, moves the lever 6, and with it the

feed rolls 9 and 10 to their initial position subjecting the material to a tensional strain and in readiness for the action of the punch. On the further turning of the shaft 2, the eccentric 3, further depresses the punch head, perforating the material, after which the further movement of the shaft returns all the parts to their normal position.

With a machine of this character perforations or indentations or ornamental edge cutting may be made in the weakest materials with the most exact spacing, while as a further precaution the number of spacing pegs may be increased so as to enter two or more indentations or perforations previously formed by the punch to insure greater accuracy.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A feeding and spacing device for punching presses and the like, comprising a spacing peg adapted to enter an opening or indentation formed by the punch and prior to each successive movement of the latter, with mechanism for intermittingly feeding the material being acted upon toward the punch, substantially as specified.

2. The combination of the punch head, a spacing or guiding peg adapted to enter perforations or indentations formed by the punch and to hold such material during the action of the punch, with feed rollers and mechanism for operating the same, substantially as specified.

3. The combination of the punch head, a punch thereon, a spacing peg also secured to said punch head and projecting therefrom to a greater distance than does the punch, with mechanism for feeding and holding the material being acted upon, substantially as specified.

4. The combination of the frame, an operating shaft journaled therein, a punch head, an eccentric or cam mounted upon said shaft for reciprocating said punch head, a punch and a spacing peg carried by the punch head, a slotted lever fulcrumed to the frame, an operating cam on said shaft for oscillating said lever, and feed rolls having journal boxes adapted to the slotted portion of said lever, substantially as specified.

5. The combination of the frame, 1, a shaft

2, journaled therein, an eccentric, 3, and a
cam 4, secured to said shaft, a punch head op-
eratively connected to said eccentric, a punch
and a spacing peg carried by the punch head,
5 a lever 6, slotted at its lower portion and hav-
ing at its upper end an antifriction roller 7,
adapted to be operated upon by said cam,
journal boxes adapted to the slotted portion
of such lever, springs 12, acting on said jour-
10 nal boxes and feed rollers carried by the jour-

nal boxes and adapted to feed the material to
be punched, substantially as specified.

In testimony that we claim the foregoing as
our invention we have signed our names in
presence of two subscribing witnesses.

EMIL SALTZKORN.
LUDWIG NICOLAI.

Witnesses:

HERNANDO DE SOTO,
MARTHA LOHMANN.