

F. PACHER.

DEVICE FOR INTRODUCING SWAGES INTO A FORGING PRESS OR WITHDRAWING THEM THEREFROM.

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1,057,384.

Patented Mar. 25, 1913.

Fig. 1.

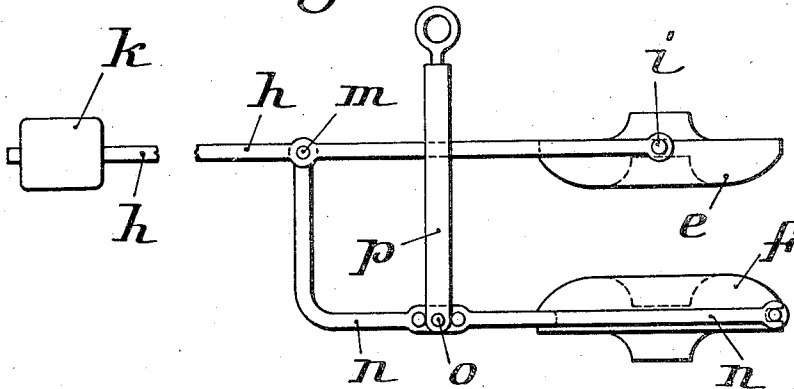
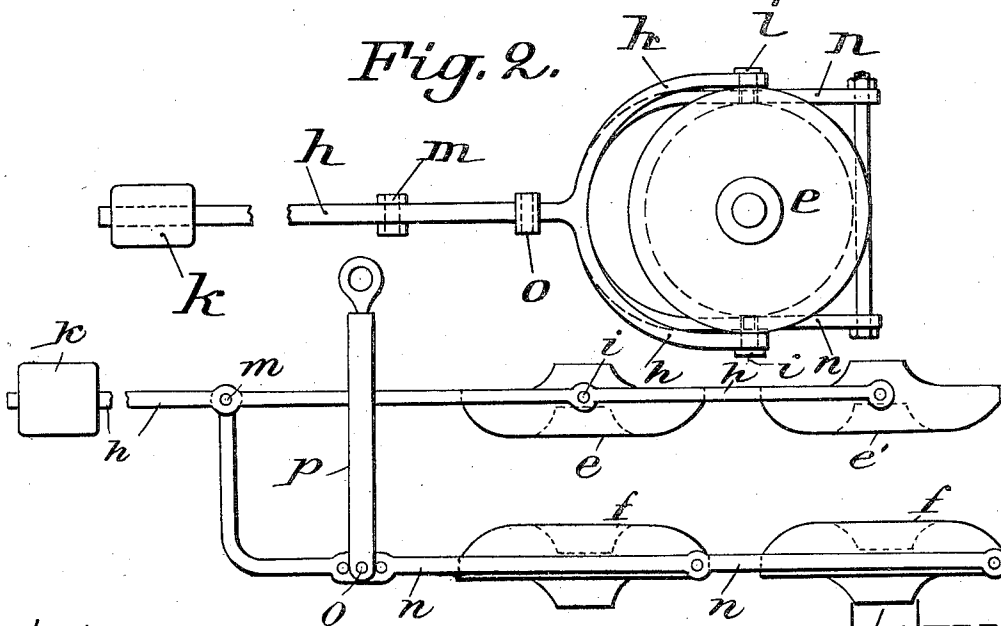


Fig. 2.



WITNESSES

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Fig. 3.

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FRANZ PACHER, OF RATH, NEAR DUSSELDORF, GERMANY.

DEVICE FOR INTRODUCING SWAGES INTO A FORGING-PRESS OR WITHDRAWING THEM THEREFROM.

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Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed April 12, 1909. Serial No. 489,412.

To all whom it may concern:

Be it known that I, FRANZ PACHER, director, a subject of the German Emperor, residing at 59 Hohenzollern Allee, Rath, near
5 Dusseldorf, Germany, have invented certain new and useful Improvements in Devices for Introducing Swages into a Forging-Press or Withdrawing Them Therefrom; and I do hereby declare the following to be
10 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 device for facilitating the introduction of swages into and their removal from forging presses. For this purpose one swage is pivoted to or slides on a lever, and is balanced by a counterpoise. This lever is fulcrumed on a second
15 lever, itself pivoted in a framework and carrying the other swage which is also pivoted or adapted to slide. The construction is such that the first lever, together with the swage and counterpoise that it carries,
20 acts as a counterpoise to the swage on the second lever.

One form of the invention is shown in elevation and in plan respectively in Figures 1 and 2. Another modification of the invention is shown in side elevation in Fig. 3.
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In the forked end of one arm of a two-armed lever *h* one swage, for example the upper one *e*, is pivoted on pins *i*. On the other arm of this lever is an adjustable weight *k*. The fulcrum *m* of the lever *h* is carried by one end of a second lever *n* bent at right angles and free to turn on the pivot *o* carried by the support *p*. The other end of this second lever carries the bottom swage
35 in a fork in which the swage is adapted to slide. The weights and leverage are so adjusted that the lever *h*, the upper swage *e* and the counterpoise *k* together counterbalance the swage *f*. Owing to this, one person can easily insert under the press, or
40 withdraw from under the press the swages, which are suspended near the press by the support *p*.

The lever *h* or *n*, or even both, can be extended from their pivots beyond the swages and carry further swages, as is shown at *e'* and *f'* in Fig. 3.
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I claim:

1. In a device of the character described, a pair of levers, a pair of swages each
55 mounted on one arm of a lever, the lever carrying the first swage fulcrumed on the free arm of the lever carrying the second swage to act as a counterpoise for the second swage, and a counterpoise on the free
60 end of the first lever.

2. In a device of the character described, a pair of two arm levers, a pair of swages arranged in opposition one to the other, one pivoted in a fork on one arm of a lever, a
65 counterpoise on the free end of the lever, the second swage slidably mounted in a fork on one arm of the second two armed lever, the first lever fulcrumed on the free end of the second lever to act as a counterpoise for the
70 second swage.

3. In a device of the character described a pair of levers, a pair of swages arranged in opposition one to the other, each adjustably
75 mounted on one arm of a lever, the lever carrying the first swage being fulcrumed on the free arm of the lever carrying the second swage to act as a counterpoise for the second swage, and a counterpoise on the free
80 end of the first lever, the arm of each lever continued beyond its swage, and a second pair of swages mounted on the continuation of the levers and in opposition to each other, the whole being in substantial equilibrium.

4. A device for the purpose described
85 comprising a lever carrying one swage, pivoted on it, and also a counterweight, and a second lever on one end of which the first lever is fulcrumed while on another end the other swage is adapted to slide, the second
90 lever being fulcrumed in a suitable frame and the weights and leverage being so adjusted that the whole is in equilibrium, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two
95 witnesses.

FRANZ PACHER. [L. s.]

Witnesses:

OTTO KÖNIG,
WILLY KLEIN.