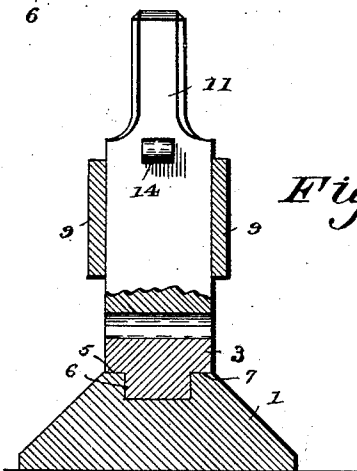
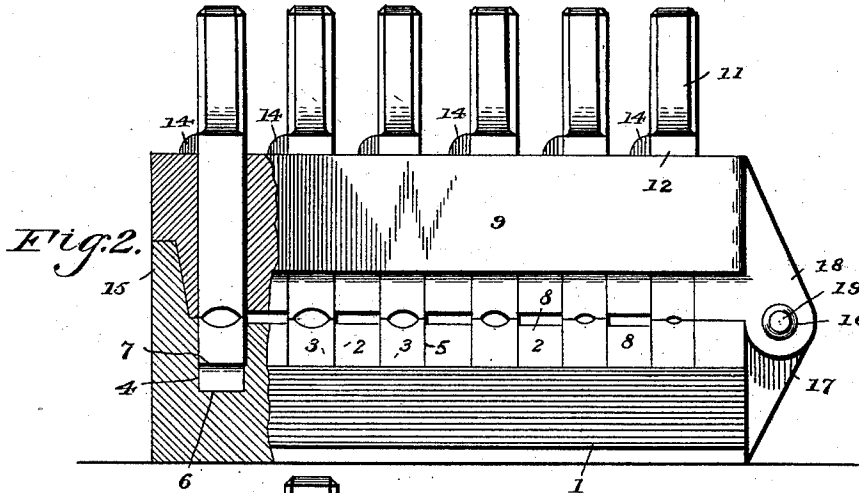
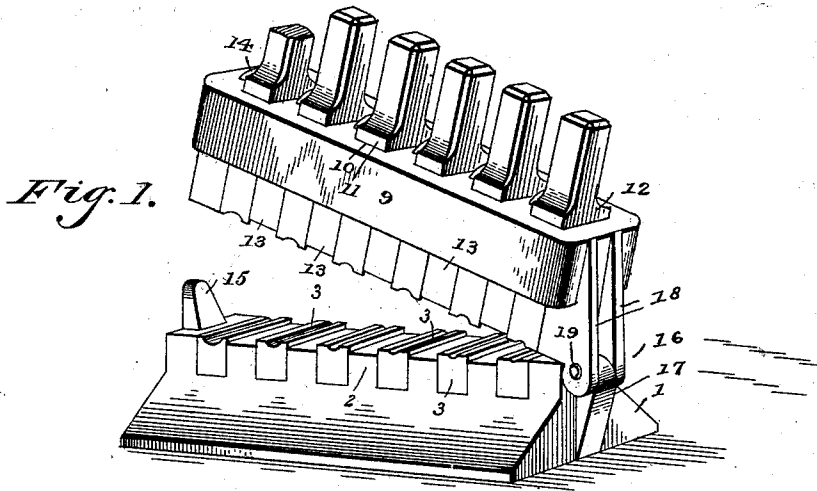


(No Model.)

C. A. METTE.
SWAGE.

No. 519,817.

Patented May 15, 1894.



Inventor

Chas. A. Mette,

By his Attorneys,

Witnesses

Julius Ulke, Jr.
O. D. Rye.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES ANTHONY METTE, OF SANTA CRUZ, CALIFORNIA.

SWAGE.

SPECIFICATION forming part of Letters Patent No. 519,817, dated May 15, 1894.

Application filed October 28, 1893. Serial No. 489,368. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ANTHONY METTE, a citizen of the United States, residing at Santa Cruz, in the county of Santa Cruz and State of California, have invented a new and useful Swage, of which the following is a specification.

My invention relates to improvements in swages or die-blocks for use in connection with forging machines and similar apparatus, and adapted to be operated by hand, foot, steam, water or other power; the objects in view being to provide a holder having complementary dies of which the upper are movable or slidable to receive the impact of a hammer, said movable or slidable dies being carried in a guide to insure their accurate alignment with the stationary dies, respectively; and to provide a holder having removable dies which may be replaced by dies having faces of different configuration, size, &c.

Further objects and advantages of my invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

In the drawings: Figure 1 is a perspective view of a swage or holder embodying my invention. Fig. 2 is a side view, partly broken away, of the same. Fig. 3 is a transverse sectional view.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a base provided with a central longitudinal rib 2; and 3 represents a series of lower or stationary dies which are fitted in sockets 4 in the base and are arranged at their upper ends in notches 5 which are formed in said rib. The dies 3 are provided with depending tangs 6 to engage the sockets 4 and are shouldered as shown at 7 to rest upon the upper surface of the base in the intervals between the blocks or portions of the rib which are separated by the notches 5. The interposed blocks or portions 8 of the rib 2 serve as braces to prevent deflection of the upper portions of the dies and terminate short of the upper ends of the latter, as shown clearly in Fig. 2. The movable member of the die-block consists of a guide arm 9 which is hinged to the base at one end and is provided with a series of guides 10 which are aligned respect-

ively, with the pockets in the base to receive the movable dies 11 which project above the surface of the guide arm to form an impact post 12 and below said arm to coact with the stationary dies. Bracing blocks 13 depend from the guiding arm between the lower projecting ends of the movable dies to prevent deflection thereof, and lateral projections or stops 14 are provided to engage the upper surface of the guiding arm to check the downward movements of the movable dies and prevent displacement thereof when the arm is elevated at its free end. The bracing blocks 13 terminate short of the plane of the lower ends of the movable dies, when the latter are at the limit of their depression, or short of the plane of the upper surfaces of the lower bracing blocks 8. The base is provided at its outer end with an upstanding finger 15 to engage a corresponding pocket in the free end of the guiding arm when the latter is lowered into its operative position, as shown in Fig. 2. The connection between the base and the guiding arm consists of a hinge 16 comprising an ear 17, integral with the base, which is fitted between parallel ears 18, integral with the guiding arm, and a pivot-pin 19 which engages registering perforations in the said ear.

By the construction described the operator is enabled to hold the bar or article under treatment and strike or otherwise operate the upper or movable die, without the assistance of a "helper," as in the ordinary practice, and an additional advantage lies in the fact that the movable die is held more firmly and positively than can be accomplished by hand and the blow of a hammer cannot cause its deflection.

It will be understood that the removability of the dies enables them to be replaced, as required, by dies of different size, shape, &c., according to the work to be accomplished, the body portions, or those portions which engage the guides and sockets, being identical in size and shape.

Various changes in the form, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described the invention, what I claim is—

1. In a device of the class described, the

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combination of a base provided with spaced sockets, stationary dies fitted in said sockets, a guiding arm hinged to said base and provided with spaced guides, and movable dies
5 slidably fitted in said guides, respectively in alignment with the stationary dies and having upwardly projecting impact posts, substantially as specified.

2. In a device of the class described, the
10 combination of a base provided with spaced sockets, stationary dies provided with depending tangs engaging said sockets and lateral shoulders engaging the surface of the base, bracing blocks interposed between said dies,

a guiding arm hinged to the base and provided with spaced guides and interposed depending bracing blocks, movable dies fitted in said guides and provided with stops, and a finger carried by the base to engage a pocket in the guiding arm, substantially as specified. 15 20

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHAS. ANTHONY METTE.

Witnesses:

G. C. PRATCHNER,

H. B. TOWNE.