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DOUBLE ACTING MACHINE FOR CUTTING THE TEETH IN SAFETY RAZOR GUARDS.

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1,384,328. Patented July 12, 1921.

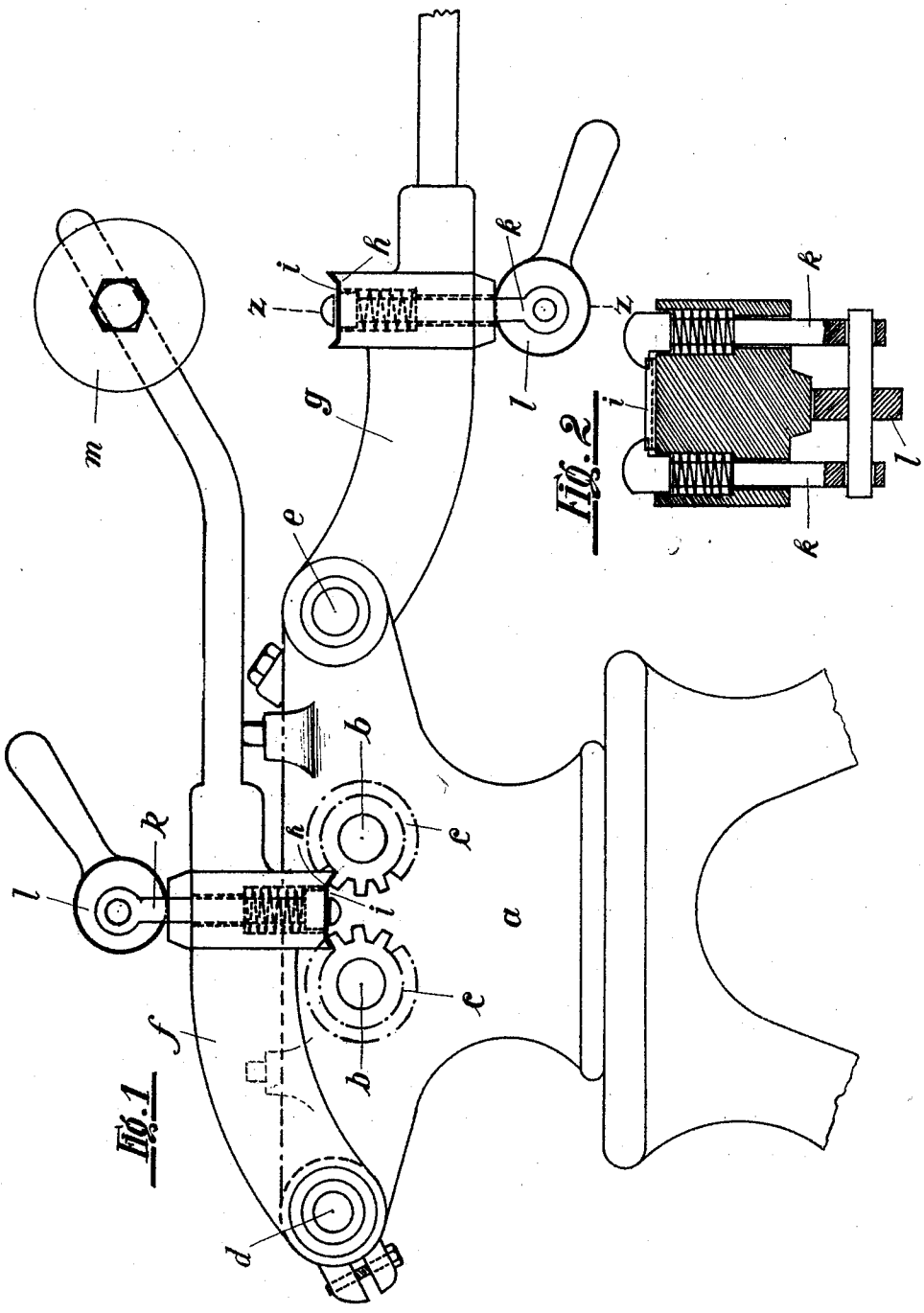


Fig. 1

Fig. 2

Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT MIDDELDORF, OF SOLINGEN, GERMANY.

DOUBLE-ACTING MACHINE FOR CUTTING THE TEETH IN SAFETY-RAZOR GUARDS.

1,384,328. Specification of Letters Patent. Patented July 12, 1921.

Application filed November 13, 1919. Serial No. 337,891.

To all whom it may concern:

Be it known that I, ROBERT MIDDELDORF, a citizen of the German Republic, and residing at Solingen, Germany, have invented certain new and useful Improvements in Double-Acting Machines for Cutting the Teeth in Safety-Razor Guards, of which the following is a specification.

This invention relates to an improved double-acting machine for cutting the teeth in guards for safety-razors having two cutting-edges, by one working-action on both longitudinal edges of the guards.

In the annexed drawing: Figure 1 is a side-view of the machine, while Fig. 2 is a section on the line *z*—*z* of Fig. 1.

In a double-walled bearing *a*, two axles *b* are revolubly mounted, on which from both outer sides of the walls of the bearing *a* disk-like cutters *c* are keyed. The axles *b* are separately driven in any appropriate way. Furthermore, axles *d*, *e* are mounted in the walls of the bearing. On the axle *d* a lever *f* is mounted on one side of the bearing, and on the axle *e* a lever *g* is mounted on the other side of the bearing. Said levers serve as holders for the guards *i* to be cut, which, for this purpose, are located upon a correspondingly shaped seat *h* of said levers and secured thereon by means of spring-pressed arms *k*, which are pressed thereon by hand-operated cam-levers *l*.

Upon the levers *f*, *g* being successively turned toward the cutters *c* (see lever *f*), the guards *i* come within reach of said cutters while a counterweight *m* on the free end of each lever presses the same down until the cutting of the teeth in the guards has been completed. Thereupon the levers come to bear upon abutments *x* cast on the bearing *a* of the machine, whereby the movement of the levers toward the cutters is stopped.

The machine is double-acting, the interchange of the finished guards on one lever being done while the guard on the other lever is being cut.

Obviously, the machine can also be used for cutting other articles.

What I claim, is:—

In a double-acting machine for cutting the teeth in guards of safety-razors having two cutting-edges, in combination, two pairs of cutters, and two counterweighted levers for the reception of said guards located to bring two guards with their longitudinal edges successively one within reach of one pair and the other within reach of the other pair of cutters, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ROBERT MIDDELDORF.

Witnesses:

FRITZ WEBB,

WILLY BETTZ.