No. 881,538. PATENTED MAR. 10, 1908.

A. BIENK.

WOOD CLEAVER.

APPLICATION FILED JULY 25, 1906.

Fig. 1.

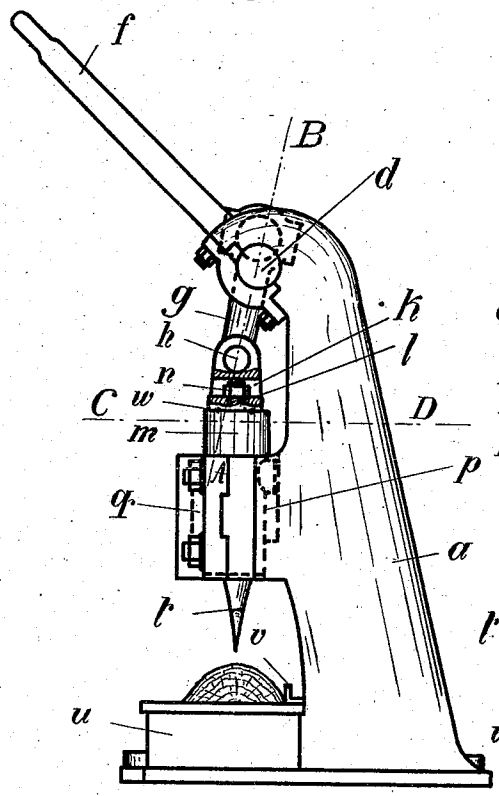
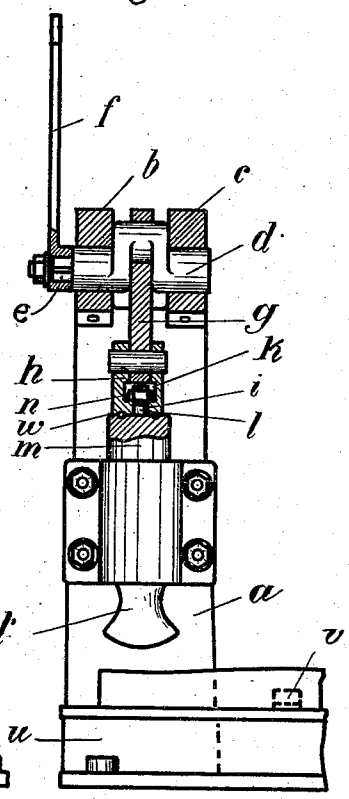


Fig. 2.



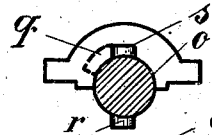


Fig. 4.

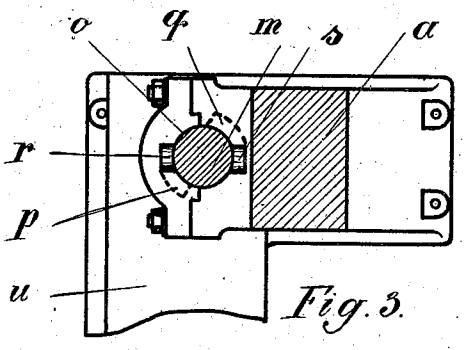


Fig. 3.

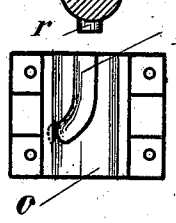


Fig. 5.

Witnesses:

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WOOD-CLEAVER.

No. 881,538. Specification of Letters Patent. Patented March 10, 1908.

Application filed July 25, 1906. Serial No. 327,784.

To all whom it may concern:

Be it known that I, ADOLPH BIENK, a citizen of German Empire, residing at Königsberg, in Preussen, Germany, have invented new and useful Improvements in Wood-Cleavers, of which the following is a specification.

My invention relates to a wood splitting machine the object of which is to facilitate the work of preparing split logs for daily use.

My device is illustrated on the drawing herewith in which

Figure 1 is a side view of the machine, Fig. 2 a front view of the same with the exception of the top portion which is a vertical section on the line A—B of Fig. 1. Fig. 3 is a horizontal section on the line C—D of Fig. 1; Fig. 4 is a top view of the vertical guide block herein referred to and Fig. 5 an elevation of the same.

The machine consists of a block frame *a* of cast iron or steel which has on top a pair of cheeks *b*, *c* carrying a crank shaft *d*. The latter is on one end provided with a projection *e* for the securement thereon of a lever *f* or other operating means. In the said crank shaft *d* is further secured a connecting rod *g* the lower end of which is rotarily mounted in a foot block *h*. The latter is provided with a bore *i* which has an aperture *k*. Through the said bore is passed the stud *l* of an axially rotatable punch *m* while the said aperture *k* receives a nut *n* to secure the said stud *l*. The punch *m* has a pair of trunnions *r* and *s* and operates in a vertical covered guide block *o* provided with grooves *p*, *q* guiding the said trunnions. The said grooves *p*, *q* are by two thirds of their lengths vertically straight while the remainder is peripherally curved. The bottom end of the punch terminates in a hatchet *t* integral therewith or rigidly secured thereto.

At the foot of the machine, beneath the hatchet, there may be provided a block *u* with lateral guide bars *v* or any other support adapted to receive and hold a log of wood intended for cleaving. To facilitate the axial turning of the punch *m* with the hatchet there may be provided on the top-end, between the same and the foot *h* of the connecting rod aforesaid, a ball-bearing *w*.

The operation of the machine is very plain: the log is laid upon the block *u*. When the lever *f* is turned down, the crank *d* forces the rod *g* downward, which in turn acts upon the punch *m* with the hatchet *t*. The latter goes into the wood and then through the action of the curves of the guide grooves, makes an axial movement, thereby splitting the wood. The machine can be easily operated by one person.

What I claim as my invention and desire to protect by Letters Patent is:

A wood cleaver comprising the combination of a block-frame, a crank-shaft on top supported therein, a connecting rod secured in the said crank-shaft, a foot rotarily attached to the bottom-end of the said rod, a vertical guide-block secured in the said frame-block a punch guided in the said guide block and vertically and axially movable therein, radial trunnions on the said punch, the said guide block having grooves receiving the said trunnions and being vertical and straight for the greater portion of their lengths and then turning into peripheral curves, a hatchet in the bottom-end of the said punch and a support adapted to receive and hold a log of wood at the foot of the machine and within reach of the said hatchet, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADOLPH BIENK.

Witnesses:

M. HANNKE,

OSCAR PASSEKELE