(No Model.)

B. FLECK.

MILITARY DRUM.

No. 388,771. Patented Aug. 28, 1888.

FIG. 1.

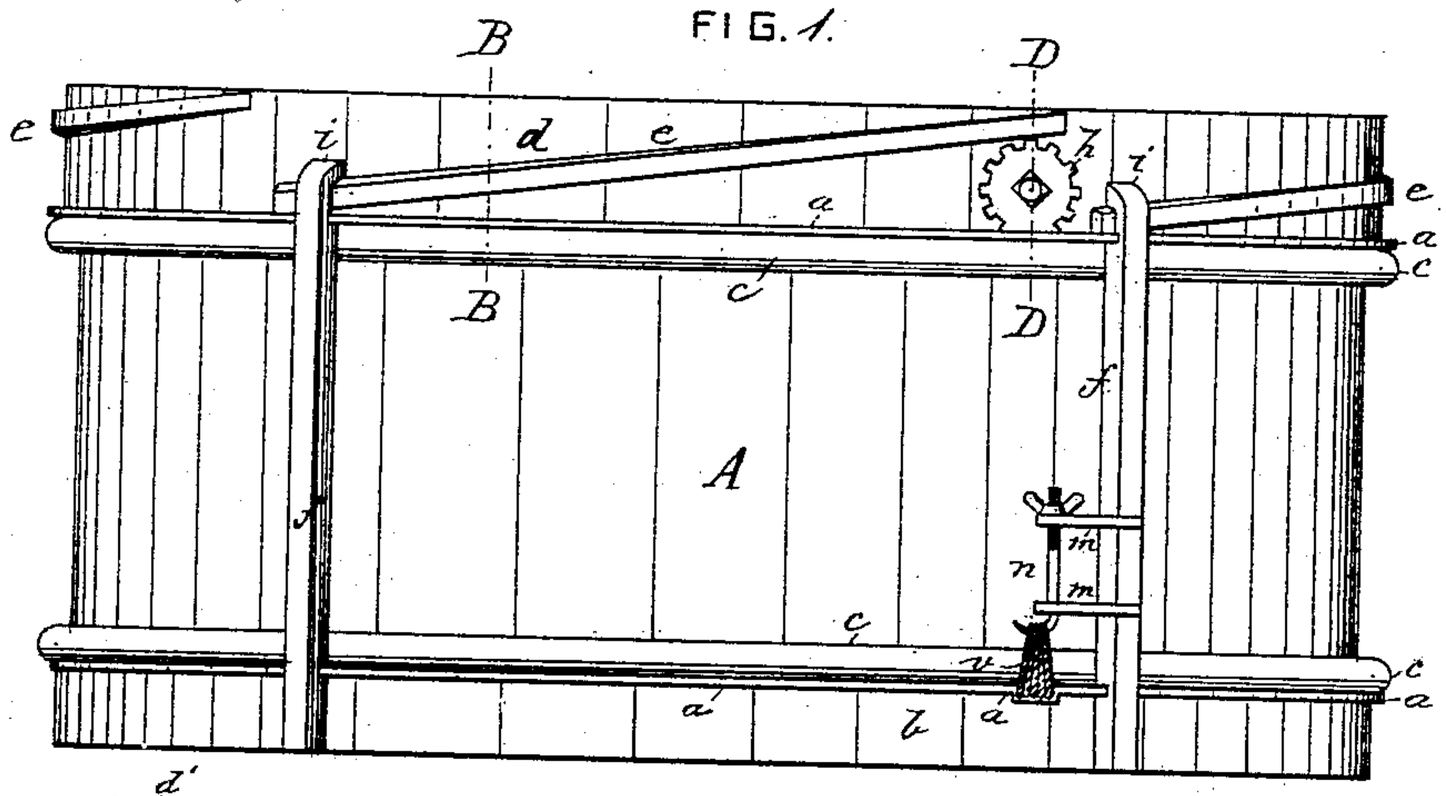

FIG. 3.

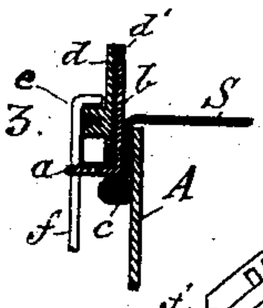

FIG. 4.

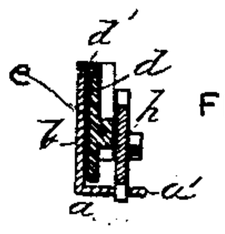

FIG. 2.

WITNESSES.
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UNITED STATES PATENT OFFICE.

BERNHARD FLECK, OF MÜHLHAUSEN, THURINGIA, ASSIGNOR TO HEILBRUNN SÖHNE, OF ERFURT, GERMANY.

MILITARY DRUM.

SPECIFICATION forming part of Letters Patent No. 388,771, dated August 28, 1888.

Application filed November 29, 1887. Serial No. 256,474. (No model.) Patented in Germany June 10, 1885, No. 34,594; in Austria-Hungary January 25, 1886, No. 38,935; in England June 29, 1886, No. 8,553, and in Italy June 30, 1886, No. 20,235.

To all whom it may concern:

Be it known that I, BERNHARD FLECK, of Mühlhausen, Thuringia, Germany, have invented a new and useful Improvement in Military Drums, (which has been patented in the following countries: in Germany June 10, 1885, No. 34,594; in England June 29, 1886, No. 8,553; in Austria-Hungary January 25, 1886, No. 38,935, and in Italy June 30, 1886, No. 20,235,) of which the following is a specification.

This invention relates to an arrangement for tightening or loosening the drum-heads of a drum; and it consists in the attachment of inclined ways to the upper drum-head ring, upon which rods embracing the lower drum-head are made to slide.

In the accompanying drawings, Figure 1 represents an outside view of a drum embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a section at line B B, Fig. 1; and Fig. 4 a section at line D D, Fig. 1.

Flanges *a* of the drum-head rings *b* press upon the projecting edges or ends *c* of the drum-head skin S, and stretch thereby said skins over the drum-body A. Around the upper drum-head *b* a ring, *d*, is placed, having an inwardly-projecting flange, *d'*, resting upon said ring *b*. A small gear-wheel, *h*, is attached to this ring *d*, meshing into a perforated ring, *p*, forming a rack attached to the flange *a* of upper drum-head ring *b*, whereby said ring *d* can be turned backward or forward. To this ring *d* inclined ribs *e* are attached parallel to each other.

f f are rods arranged around the body A of the drum and guided in suitable recesses made in the flanges *a* of rings *b*. The lower ends of these rods are attached to the lower ring *b*, and the upper ends of said rods are provided with projecting noses *i*, resting upon the inclined rib *e* on ring *d*.

When the ring *d* is turned, say, to the left, by means of the small gear-wheel *h*, the ends of the rods *f* will move up the inclined surfaces *e*, and force thereby the rings *b* toward each other, which by their action upon the ends of the drum-head skins S will tighten the same, while when said ring *d* is moved in the opposite direction, toward the right, the rods *f* move down the inclined surfaces *e*, whereby the pressure is taken off the rings *b*, and consequently the drum-head skins loosened.

Instead of attaching the lower ends of the rods *f* to the lower drum-head *b*, arms *m* may be attached to the rods *f*, supporting a screw-bolt, *n*, the lower ends of which are connected by cords *v* with flange *a* of the lower drum-head *b*. (See Fig. 1.)

What I claim is—

In a drum, the combination of ring *d* with inclined surfaces *e e* around the upper drum-head, with rod *f* attached to the lower drum-head and sliding upon the inclined surfaces *e*, and with means of turning the ring *d*, substantially as and for the purpose specified.

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

BERNHARD FLECK.

Witnesses:
OCTAVIO KNASSBY,
APHONS JACOBWAY.