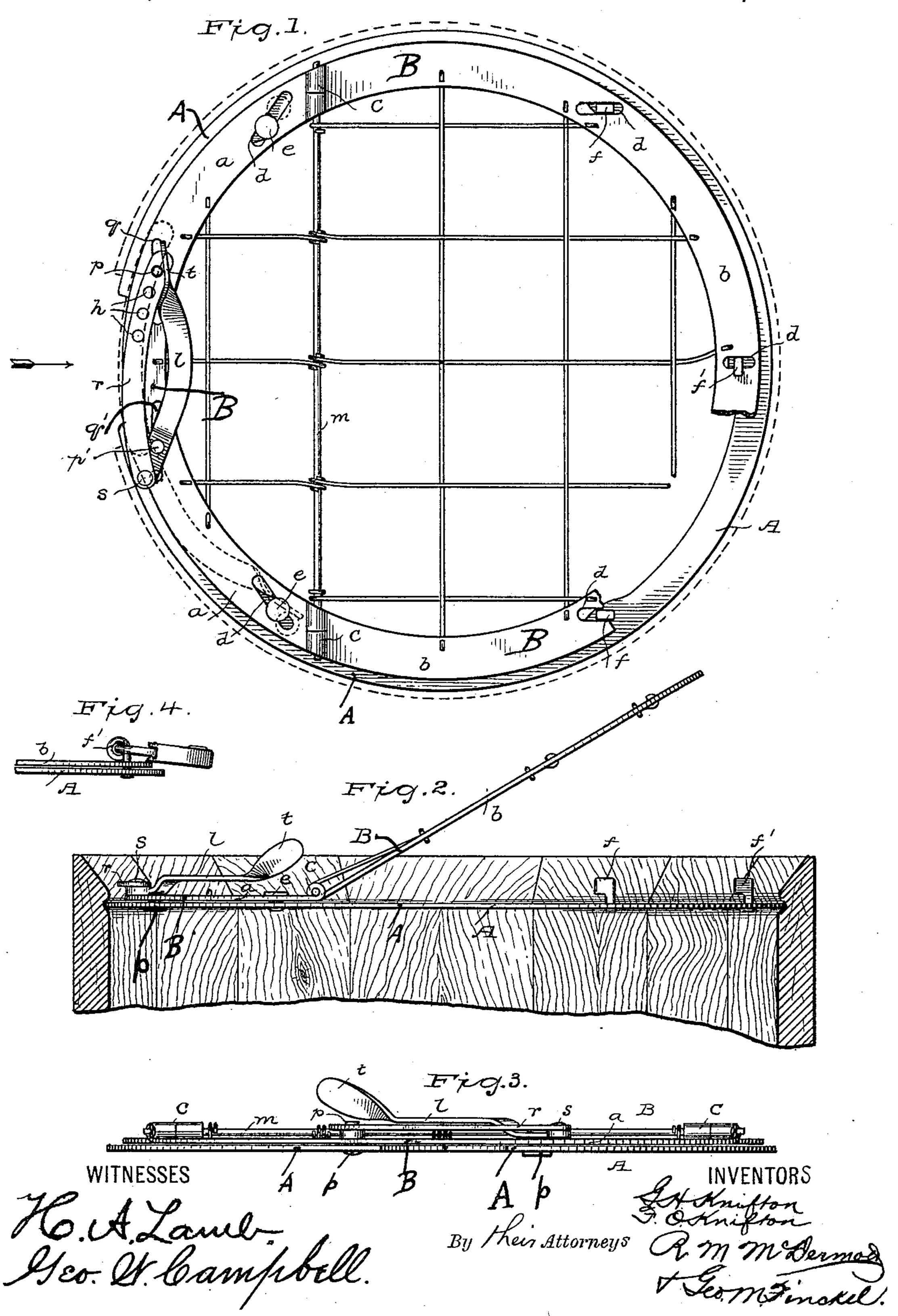
G. H. & F. O. KNIFTON.

GUARD HEAD FOR BARRELS.

No. 365,079.

Patented June 21, 1887.



United States Patent Office.

GEORGE H. KNIFTON AND FRANK O. KNIFTON, OF DENVER, COLORADO.

GUARD-HEAD FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 365,079, dated June 21, 1887.

Application filed April 2, 1887. Serial No. 233,392. (No model.)

To all whom it may concern:

Be it known that we, George H. Knifton and Frank O. Knifton, both citizens of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Guard-Heads for Barrels; and we do declare the following to be 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of our invention is to provide a simple, cheap, and durable guard for the heads

of barrels and like vessels.

The invention is embodied in the improved construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a top view of a guard made in accordance with our invention, a portion being broken out to illustrate the construction more clearly. Fig. 25 2 is a sectional view of the head of a barrel with our improved guard therein, the hinged section or cover being raised. Fig. 3 is an edge view looking in the direction of the arrow, Fig. 1; and Fig. 4 is a detail view of a modification, to be hereinafter referred to.

Where like letters occur in the several figures they indicate corresponding parts.

The letter A designates the main supporting ring or plate, which is preferably made of sheet 35 metal, and which is split at one point. Upon this ring is secured another ring, B, also of metal, made in two sections, a and b, hinged together, as indicated at c. Each of these sections is provided with suitable slots, q, q', 40 and d, through which pass studs or buttons pp', e e, and fff' in the ring A. The studes e e, which pass through the slots d in the section a, are headed, so that this section is not readily separable from the ring A. The studs or but-45 tons f, f, and f' are fastened in the ring, so that they may be turned easily, and their heads are made narrow, so that when they lie in the proper direction the slots in the section b will permit the said section to be placed down |

hold it there, as indicated at f' in Fig. 1. Upon the ends of the ring A are two pins, p and p', which pass through slots qq' in the section a. One end of the bar r is pivoted on the pin p, and its other end is pivoted on a 55 stud, s, of the short arm of a lever, l, which latter has its fulcrum on the pin p'. The lever l is bent or twisted at its free end to form a convenient finger-piece, t. The slots in the ring-sections a and b should extend in such a $\epsilon_{\rm C}$ direction that when force is applied to separate the ends of the ring A and expand it the shanks of the pins or buttons will not impinge against the sides forming the slots so as to prevent such expansion. They should have sub- 65 stantially the direction indicated in the drawings. A rod, m, extending across the upper ring, may serve as the pintle of both hinges, and a suitable wire-netting is stretched between the sides of the sections to prevent the 70 insertion of a hand into the barrel when the guard is in place. The head of the stud f'may be made as a ring to receive a padlock, and the section or guard b locked upon the ring or plate A, as shown in Fig. 4. The bar r may 75 have a series of holes, h, to receive the pivotpin, so that the ring A may be expanded more or less, as may be necessary.

Constructed as described in the foregoing, the guard is applied to a barrel-head as fol-80 lows: Let the lever l be in the position indicated by full lines, Fig. 1, and the guard be placed in the head of a barrel in the plane of the chine or groove. Then, if the lever be turned to the position indicated by broken 85 lines in said figure, the split ring or plate A will be expanded so as to extend into said groove. When the ring has been thus expanded, the pivots of the bar r and the lever I should be in such a line that the tendency of 90 the ring to contract cannot throw the lever into its original position. The lever can, however, be locked in any position that may be necessary by obvious means. It is plain that the upper section, B, (composed in the pres- 95 ent instance of two hinged parts, a and b,) could be made as a solid disk and the device

used as a barrel-head.

permit the said section to be placed down | We do not limit ourselves to the precise deso against the ring A and the buttons turned to | tails of constructions herein shown and de-100 scribed, because they can be modified without departing from the spirit and scope of our invention.

We claim as our invention—

1. The herein-described improved barrel-head guard, composed of the split ring having pins or studs, a ring arranged above said split ring, composed of two hinged sections having slots, substantially as shown, through which to the pins or studs on the split ring project, one

of said sections being secured to the split ring by the studs which extend through it, and means, substantially as described, for expand-

ing the split ring.

of a split ring having pins or studs, a ring arranged above the first-described ring, having slots, substantially as shown, through which the studs or pins on the first-described ring project, and means, substantially as described, for expanding the split ring.

3. In a barrel-head guard, the split ring having pins or studs, a slotted ring arranged above said split ring, so that the pins on the split ring may project through the slotted ring 25 and permit the split ring to be expanded, combined with an expanding device for the split ring, consisting of a bar, r, pivoted on a pin on the split ring, and a lever, l, also pivoted on a pin on the split ring, the said bar 30 and lever being constructed and operating substantially as described.

In testimony whereof we affix our signatures

in presence of two witnesses.

GEORGE H. KNIFTON. FRANK O. KNIFTON.

Witnesses:
John Low,
B. L. Pollock.