(No Model.)

A. H. MERRIMAN.

PITMAN.

No. 248,193. Patented Oct. 11, 1881.

Fig. 1.

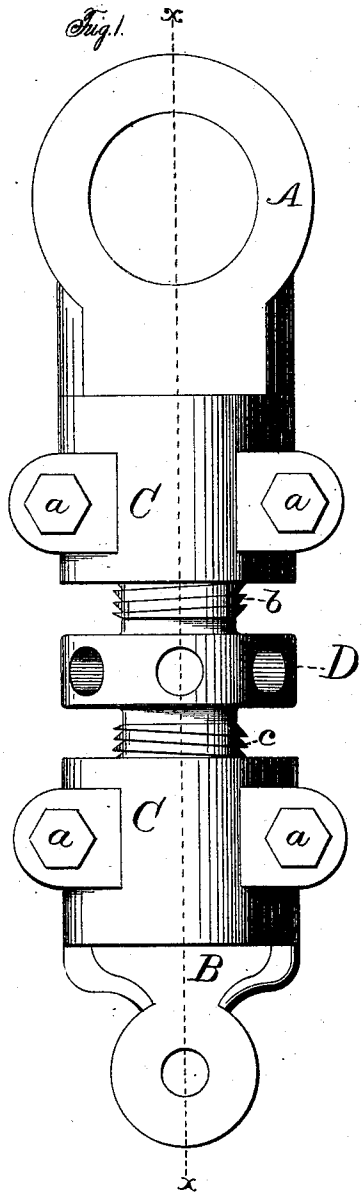
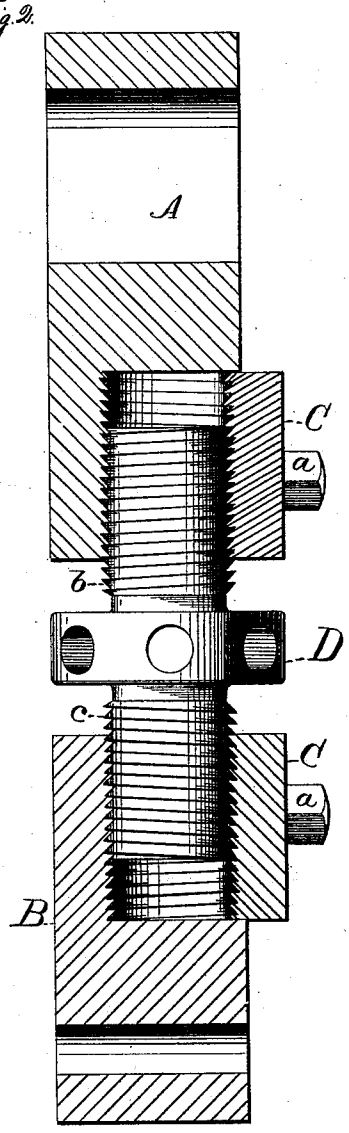


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

ALANSON H. MERRIMAN, OF MERIDEN, CONNECTICUT.

PITMAN.

SPECIFICATION forming part of Letters Patent No. 248,193, dated October 11, 1881.

Application filed June 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALANSON H. MERRIMAN, of Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Pitmen, of which the following is a specification.

My invention relates to improvements in pitmen in which the two ends are provided with divided sockets and binding mechanism, and are adjusted to and from each other by a right and left hand screw, the threads of which upon one side are at right angles to the axis of the screw; and the objects of my improvements are, first, greater strength; second, to avoid the necessity of binding the ends of the screw with as great force as when the ordinary form of screw-thread is employed; and, third, to enable the exact length to which the pitman is adjusted to be determined when the screw is only loosely bound. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 a vertical section on line *x x* of Fig. 1, but partly in elevation.

This invention is an improvement upon that patented to me February 3, 1880, and numbered 224,207, and it differs therefrom by the peculiar construction of the screw-threads.

A designates the upper end of the pitman; B, the lower end; C C, adjustable caps held in place by screws *a*, and D the head or nut having right and left hand screws *b c*. The threads of the screws *b c*, instead of the usual form, have one face formed substantially at right angles to the axis of the head. This square face is upon the upper side of the thread in screw *b*, and upon the lower side in screw *c*, so that in both cases it faces the outer ends of the screws. The threads in the pitman ends and caps are of corresponding form. As all strain upon the pitman is to force the two ends toward each other, it will be readily seen that the strain is thrown upon the square side of the threads. This avoids all tendency to force the caps outward, and thereby to let the screw move endwise in the pitman ends under pressure, so that the pitman is very strong, and all necessity of screwing the caps exceedingly tight is avoided. When the caps are loosened to adjust the length of the pitman there is no dropping down of the screw *b*, and if the lower end, B, is held up so as to engage the square faces of the male and female threads in that end the pitman will be of precisely the same length when the caps are loose enough to adjust the screws that it is when the screws are firmly bound by the caps; therefore the adjustment of the pitman to any exact length is very easily determined. When the pitman is finally adjusted to the desired length it is intended to force the divided sockets firmly upon the threads of the screw to hold them in place, but in making the adjustment it is oftentimes necessary to try more than once to get the desired length.

With my present improvement the caps or divided sockets may be left loose and the press tried, and the adjustment changed until the desired length is obtained. The sockets can then be bound upon the screws, and the act of so doing will not change the length of the pitman in the least; whereas with a thread shaped as in my former patent the sockets had to be bound firmly upon the screws every time the length of the pitman was tried, or else its length could not be determined.

I am aware that a prior patent shows a right and left hand screw for adjusting the pitman of a press, which screw is formed with a thread, one side of which is substantially at right angles to the axis of the screw; but said screw was not combined with divided sockets and mechanism for binding the socket upon its threads to hold it in place. Such a pitman is hereby disclaimed. My prior patent was not capable of producing any of the results herein specified for the present invention. The patent before referred to as showing substantially the present form of screw gains the advantage of superior strength, but none of the other advantages set forth in this specification.

A pitman consisting of two ends, a right and left hand screw entering divided sockets, and mechanism for binding the sockets upon the threads of the screws, which pitman would not vary its length under endwise pressure, whether the sockets were firmly or loosely

bound upon the screws, is believed to be a new device, and one that operates differently from all prior pitmen.

I claim as my invention—

The combination of the head D, right and left hand screws *c b*, having the side of the threads which face their outer ends formed substantially at right angles to the axis of said screws, the two ends of the pitman having divided sockets threaded to correspond with said screws, and mechanism for binding the sockets upon the screw-threads, whereby the length of the pitman under endwise pressure is the same whether the sockets are or are not bound firmly upon said screws, substantially as described, and for the purpose specified.

ALANSON H. MERRIMAN.

Witnesses:

E. A. MERRIMAN,

CHAS. WM. MANN.