(No Model.)

T. A. BLAKE.

PITMAN FOR STONE CRUSHERS.

No. 477,400. Patented June 21, 1892.

Fig. 1

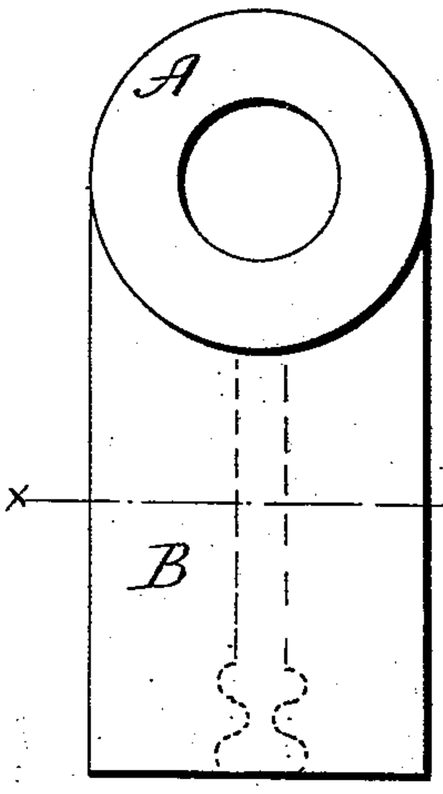


Fig. 2

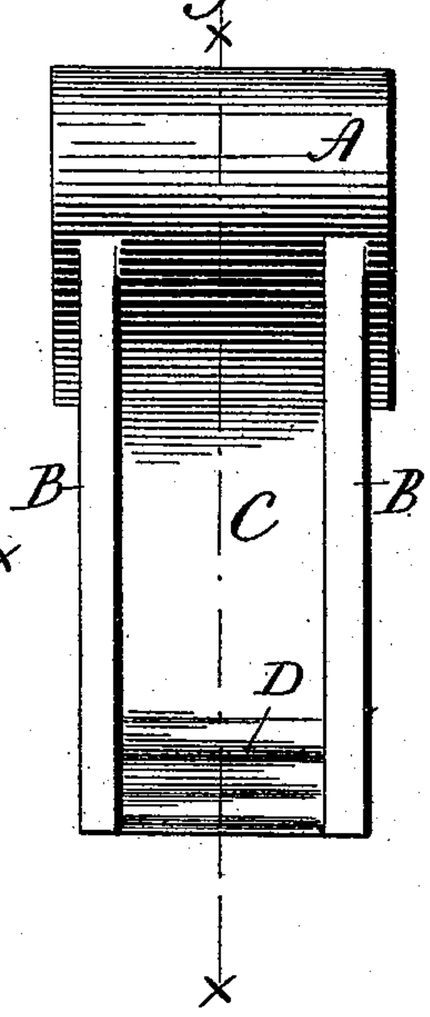


Fig. 3

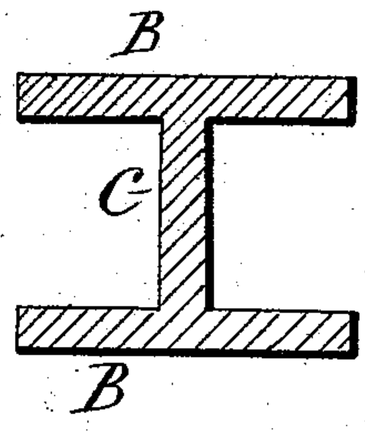
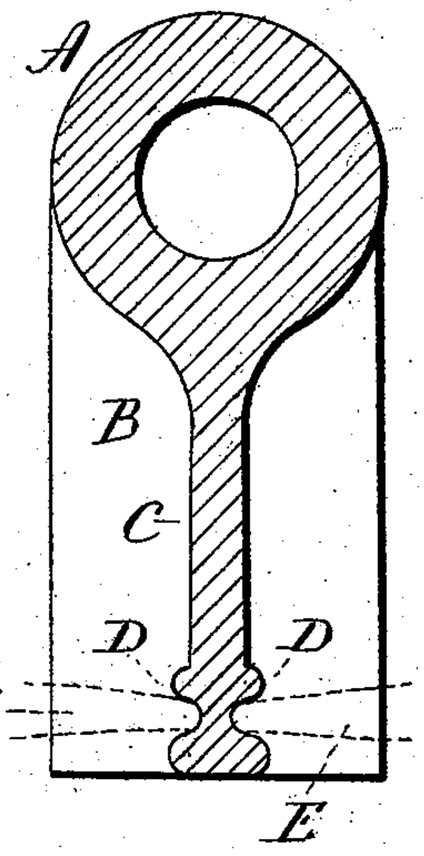


Fig. 4



Witnesses.
L. S. Shumway.
Lillian D. Kelsey

Theodore A. Blake.
Inventor,
By Attys.
Earle & Seymour

UNITED STATES PATENT OFFICE.

THEODORE A. BLAKE, OF NEW HAVEN, CONNECTICUT.

PITMAN FOR STONE-CRUSHERS.

SPECIFICATION forming part of Letters Patent No. 477,400, dated June 21, 1892.

Application filed August 3, 1891. Serial No. 401,506. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. BLAKE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Pitmen for Stone-Crushers; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the link; Fig. 2, a face view of the link; Fig. 3, a transverse section on line *x x* of Fig. 1; Fig. 4, a vertical central section on line *x x* of Fig. 2.

This invention relates to an improvement in the pitman employed in that class of stone-crushers commonly known as the "Blake" crusher.

This pitman is adapted to work between the ends of toggle-links, the pitman being operated by a crank or eccentric at one end of the pitman, the other end of the pitman constructed with seats to receive the corresponding ends of the toggle-links and so that under the rotation of the crank or eccentric the required vibratory movement is imparted to the toggles, a construction of machine too well known to require full illustration.

As usually constructed, the pitman is made of a width sufficiently great to give it the required strength. This construction causes a considerable distance between the two seats in which the respective toggles rest on the pitman. Owing to this distance between the toggles a twisting strain often comes upon the pitman, caused by the varying inclination of the toggles.

The object of my invention is to construct the pitman so that the ends of the toggle-links may be brought very near together, and yet the pitman be as strong or stronger than the usual construction; and the invention consists in constructing the pitman as a pair of flanges projecting from the head in planes at right angles to the axis of revolution by which the crank is moved and connecting the said flanges by a thin web, the said web at its ends constructed to form the seats for the pitman-links, as more fully hereinafter described.

The pitman is constructed with a head A at one end, adapted to receive the crank-pin or eccentric, as in the usual construction. From this head there extend two flanges B B in planes parallel with each other, but at right angles to the axis of the head of the pitman. The width of these flanges as here represented is substantially the same as the diameter of the head. The distance between the two flanges is substantially the width of the toggle-links. The two flanges are connected by a web C, and at the end opposite the head and upon opposite sides seats D D are formed in the web, adapted to receive the two toggle-links E E, represented in broken lines, Fig. 4, as usual in stone-crushers of the character described. These seats are constructed so as to be as near together as may be with due regard to the strength and wear of the machine. The flanges B B are designed to give the requisite strength to the pitman. The web C above the seats may therefore be omitted, yet I prefer to construct it with the web extending from the head to the seats as an additional strength to the pitman. By bringing the seats so near together and giving to them the strength produced by the flange-like sides the tendency to breakage of the pitman heretofore due to the twisting strain of the toggle-links is very greatly reduced, if not entirely avoided.

I do not claim, broadly, a pitman having flanges at its ends, with a web extending and forming a connection between said flanges, as such, I am aware, is not new, pitmen of this form having before been made, but with a block at the end extending across between the flanges and seats for the toggles formed in the blocks, bringing said seats distant from each other equal, substantially, to the full width of the flanges, such construction being that hereinbefore referred to as the usual construction.

I claim—

The herein-described pitman for stone-crushers, consisting of the head A, adapted for attachment to the crank and constructed with flanges projecting therefrom in planes substantially parallel with each other, but at right angles to the axis of the head and with a web C extending from the said head toward the end of and between the flanges, the said

web at its end constructed with transverse seats D D across its lower end and between the flanges, the said seats being adapted to receive the toggles, and whereby the said seats are brought near together and between the said flanges, substantially as described.

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

THEODORE A. BLAKE.

Witnesses:
FRED. C. EARLE,
LILLIAN D. KELSEY.