2 Sheets—Sheet 1.

T. SCOTT.

Coin-Press.

No. 211,596. Patented Jan. 21, 1879.

Fig. 1.

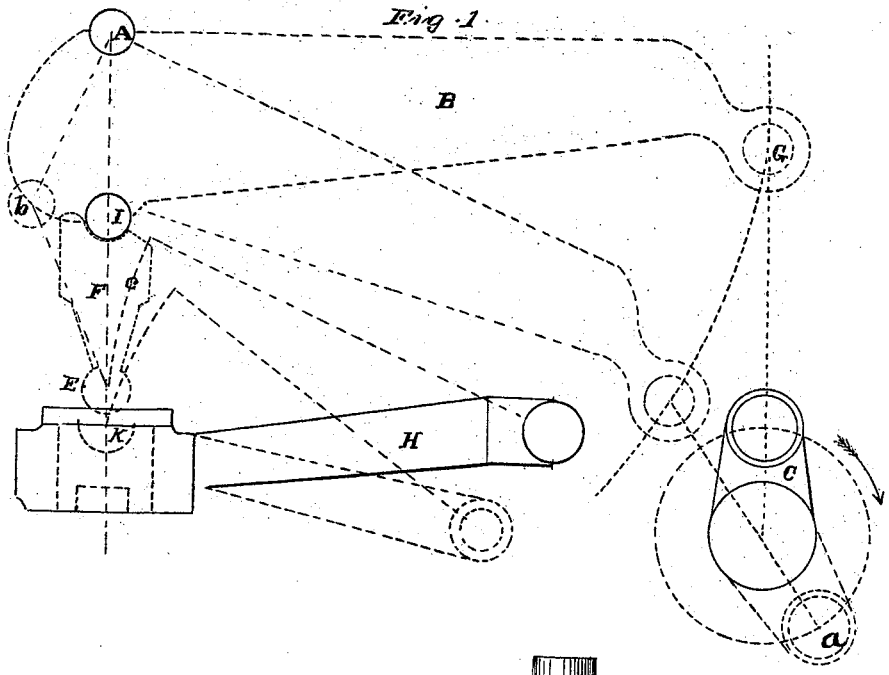


Fig. 2.

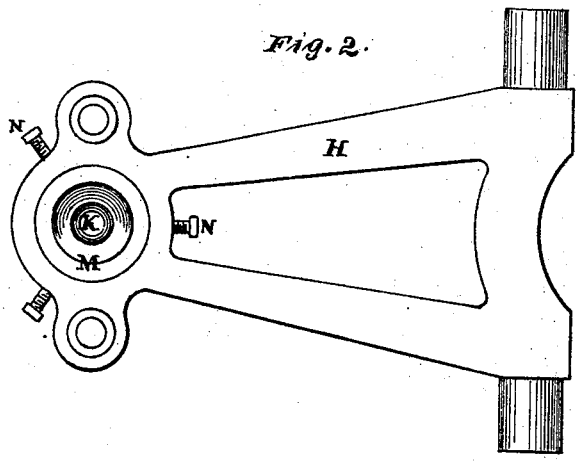


Fig. 4.

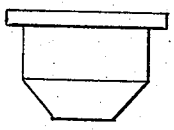


Fig. 5

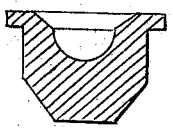


Fig. 3.

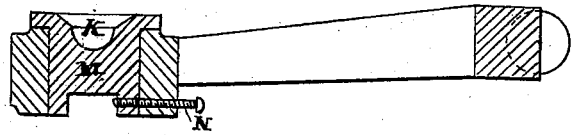


Fig. 6

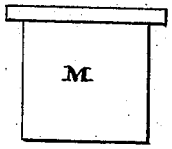
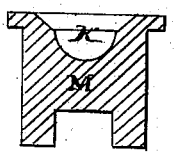


Fig. 7



Witnesses
Geo. H. Strong.
Frank A. Brooks

Inventor.
Thomas Scott
By Dewey & Co. Attys

2 Sheets—Sheet 2.

T. SCOTT.

Coin-Press.

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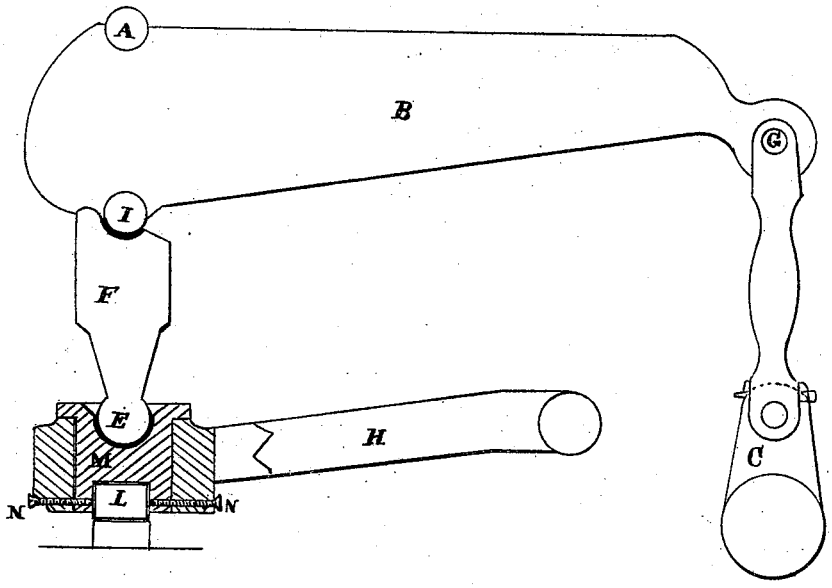
Fig. 8.



Witnesses

Geo. H. Strong.

Frank A. Brooks

Inventor

Thomas Scott

By Dewey & Co

attys

UNITED STATES PATENT OFFICE.

THOMAS SCOTT, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN COIN-PRESSES.

Specification forming part of Letters Patent No. **211,596**, dated January 21, 1879; application filed September 23, 1878.

To all whom it may concern:

Be it known that I, THOMAS SCOTT, of the city and county of San Francisco, and State of California, have invented an Improvement in Coin-Presses; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings:

My invention relates to certain improvements in that class of presses which are intended to be used for coining; and my improvements consist in certain details of construction, and in the mounting of the triangle, whereby I strengthen the press in its different parts and render it more efficient in its action, as will be more fully described by referring to the accompanying drawings, in which—

Figure 1 is a view of my improvements, showing their relative positions in the press. Fig. 2 is a plan view of the triangle. Fig. 3 is a section. Figs. 4 and 5 are views of the old form of socket-piece. Figs. 6 and 7 are views of my improved socket-piece. Fig. 8, Sheet 2, is a view of my device.

A great difficulty has been experienced in the working of coin-presses, because, from the position of the triangle relative to the ball and socket, the motion necessary in working would throw the parts too far out of line, and when the pressure was brought upon the dies it would begin at an angle, so as to have a tendency to produce a rocking motion of the dies. The great strain upon the head of the triangle is thus apt to spread it, and, from the form of the socket-piece, the oil which is used in the socket would run down directly upon the face of the dies and spoil any impression which might be taken.

In the upper part of the arch of a coining-press is suspended by a pin, A, the beam or lever B, having at its opposite end the journal, into which the crank-pin G of the crank C fits.

In Fig. 1 the beam B and crank C are shown in the position they stand in the press at the moment the coin is struck. The triangle H is also shown in position at that particular point. The center-piece F, having the ball E at its lower end, for the purpose hereinafter described, is journaled at the point I to the beam B.

The crank C, which imparts the rocking motion to the beam B, revolves in the direction indicated by the arrows, and when the crank-pin C reaches the point indicated at *a* the extreme travel of the beam B is reached. At this point the lower pin center, I, where the center-piece F is journaled to the beam, will have reached the position shown by the dotted circle at *b*. The upper pin, A, being the center of motion of the beam, merely turns on its axis, so that the center-piece F, journaled, as described, at *b*, will have left its vertical position, and the center line of the same will be represented by the lines marked *c*. As, however, the crank continues to rotate and lifts the outer end of the beam, the center-piece is brought into a vertical position again, the ball at its lower end fitting tightly into the socket in the end of the triangle and giving the required pressure.

My triangle H has two trunnions at its broad end, which are fitted in appropriate journals. Its inner end or head fits in the lower part of the arch of the press, on top of the stake-seat. The upper part of the apex of this triangle has a steel socket, K, into which fits the ball E of the center-piece F. A slight rocking motion is imparted to the triangle in its trunnions, for the purpose hereinafter described.

When the beam and triangle are connected in working the ball and socket will be in contact, and it will readily be observed that in the case of the triangle, trunnioned, as described, that the deviation from line of centers is very small, while in the case of triangles of the old style it is very considerable, owing principally to the journals of its trunnions being placed so far below the center of the ball and socket.

When the lower die is in position in the press, and a blank placed therein in the collar ready to be struck, the crank continues its motion in the direction indicated, so that the beam B and center-piece F gradually approach the line of centers until the upper die, L, held on the under side of the triangle, touches the blank. The crank-pin by this time is within five inches of the center line, and until the center is passed an enormous strain on all the parts takes place. In this movement, it will be

seen that the upper bearing-point, I, of the center-piece, in contact with the beam, is, while the coin is being struck, moving in or toward the crank-shaft, while the ball E or lower bearing of the center-piece is moving out or away from the same. Now this outward movement is reduced to a minimum in the case of my triangle, while in the old one it was so considerable that this was one of the causes why the center-piece gave out so frequently. In my triangle, however, by raising the bearings for the trunnions the deviation from the line of center is very slight indeed, as the center of the trunnion and the center of the ball and socket are on the same horizontal line.

The set-screws N, for holding the upper die in position, pass through the head of the triangle and through the steel socket-piece M. This construction prevents the set-screws from straining the head, and prevents any oil from working down onto the die while the press is working.

Fig. 3 shows the method of inserting the steel socket-piece in the triangle, the recess on the lower side of said socket-piece being intended for the upper die-seat.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The improvement in coin-presses consisting in the combination, with the beam and center-piece, as described, of the triangle H, having its trunnions journaled in the same horizontal plane with the center of the socket K, so that the deviation of the ball and socket from the line of center, caused by the action of the press, shall be reduced to a minimum, substantially as herein described.

In witness whereof I have hereunto set my hand.

THOMAS SCOTT.

Witnesses:
GEO. H. STRONG,
FRANK A. BROOKS.