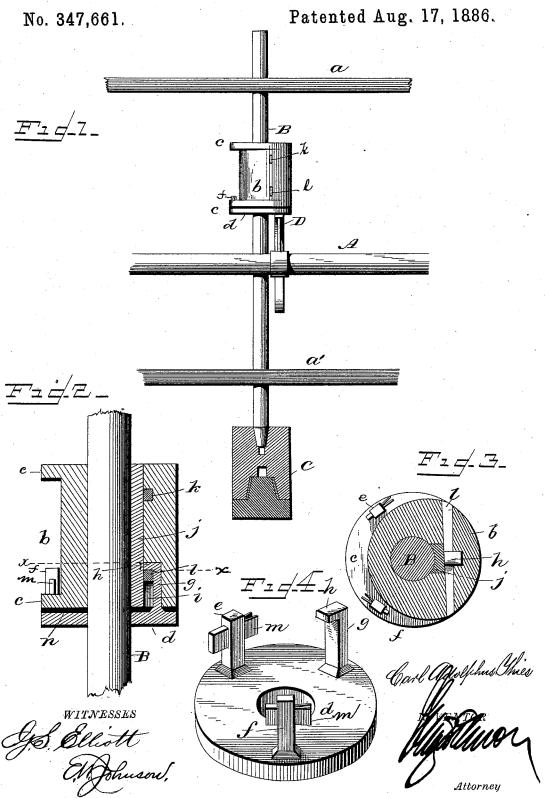
## C. A. THIES.

## TAPPET FOR STAMP MILLS.



## UNITED STATES PATENT OFFICE.

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## TAPPET FOR STAMP-MILLS.

SPECIFICATION forming part of Letters Patent No. 347,661, dated August 17, 1886.

Application filed March 25, 1886. Serial No. 196,558. (No model.)

To all whom it may concern:

Be it known that I, CARL ADOLPH THIES, a citizen of the United States of America, residing at Concord, in the county of Cabarrus 5 and State of North Carolina, have invented certain new and useful Improvements in Tappets for Stamp-Mills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable 1c others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to tappets for stampmills; and it consists in the improvements hereinafter described and claimed, whereby an improved tappet is provided that is of simple construction and adapted to have its wear-20 ing-surface readily renewed when desired.

In the accompanying drawings, forming part of this specification, Figure 1 represents in elevation one of the stamps of a mill having my improvements applied thereto. Fig. 25 2 is an enlarged central section of my improved tappet. Fig. 3 is a horizontal section on the dotted line x x, Fig. 2; and Fig. 4 is a detail perspective view of the tappet wearing-plate.

A refers to the horizontal driving-shaft of the mill, upon which are mounted the operating-cams for the several stamps composing the gang.

In the drawings it has been considered suf-35 ficient to represent a single stamp and cam therefor.

B designates the vertical shaft of the stamp C, the said shaft B playing through horizontal guides *a a'* above and below the horizontal do driving shaft A, which carries the operating cam D.

b refers to the metallic body of the tappet, which is preferably of cylindrical form, said body portion being provided at its upper and lower ends with projecting segmental or camlike portions c, the lower one of which is provided with rectangular openings, through which the lugs e f pass, as will be hereinafter referred to. The upper projecting portion c serves merely as a counter-balance of the tap-

pet, and is not employed in attaching the wearing-plate d thereto.

Beneath the body portion b of the tappet a steel wearing-plate, d, is attached, against which the cam D will abut, said plate being 55 of such a shape that it will register with both the under side of the body of the tappet and with the flange c, which projects therefrom. The said plate d has projecting from its upper side lugs ef, which correspond in cross-sec- 60 tion with the configuration of the openings in the projecting portion c of the tappet, through which they pass. The lugs e f are each provided with transverse slots, through which split keys m m pass for holding them in place, 65 said keys resting upon the upper side of the projecting portion c. The plate d is also provided with a third lug, g, which projects upwardly therefrom at about an 'equal distance from each of the other lugs ef, and terminates 70 in a head, h, which extends inwardly at right angles from the vertical portion thereof. The lower portion of the body b is provided with a vertical recess, i, which is of a sufficient size to permit the  $\log g$  with its head h being in- 75 serted therein.

It is desirable in most instances to interpose a yielding cushion or washer, n, between the upper portion of the wearing-plate d and the lower portion of the body of the tappet to reduce concussion and to provide against irregular bearing of the plate d. By inserting this washer between the parts there is no necessity of finishing the castings. As the shaft A rotates, 100

the cam D, which is attached thereto, will contact with the face of the wearing-plate d, so as to elevate the tappet in the usual manner, and when said plate is worn so as to be useless it 5 can be readily replaced by withdrawing the gib l and split keys m m. The tappet can be securely held when adjusted vertically by the key j, which is located in a recess in the tappet, so that it will bear upon the shaft, said to key being locked in place by a gib, K.

I am aware that prior to my invention it has been proposed to provide a tappet with a removable wearing-plate secured to the body-portion of the tappet by bolts; and I do not claim such construction, broadly.

I claim-

The combination, with a tappet-body having a perforated projecting portion, e, and a recess, i, of a wearing-plate, d, provided with slotted lugs ef, adapted to pass through the 20 perforations in said projecting portion, and a headed lug, g, adapted to enter said recess i, split keys m m, for securing the lugs ef, and a gib or key, l, for holding the headed lug g in place, substantially as set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

CARL ADOLPH THIES.

Witnesses:

WILLIAM CAXTON, HORACE L. BEALL.