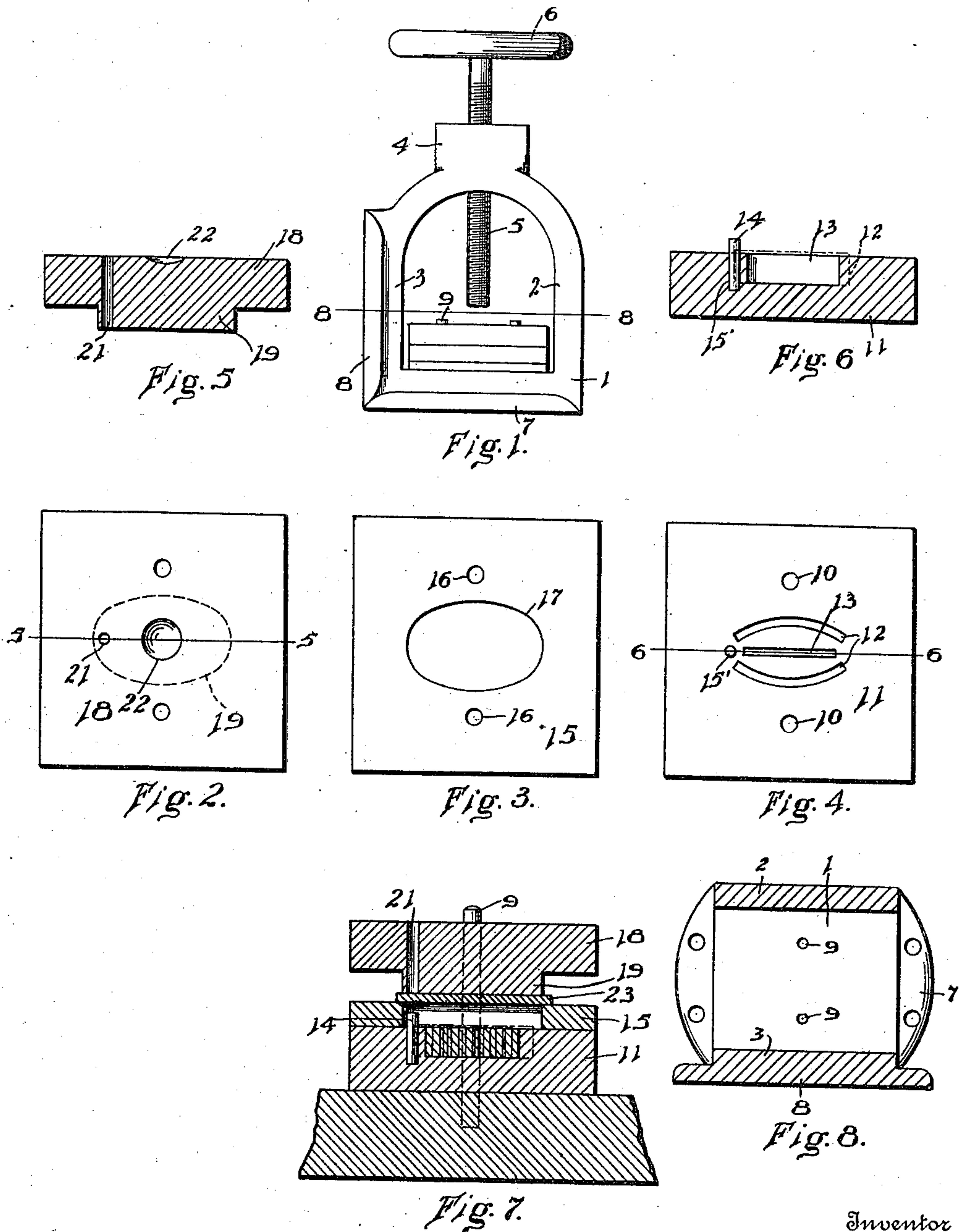


H. G. BALLOU.  
CUTTER AND STAMPING DIE.  
APPLICATION FILED OCT. 18, 1909.

976,139.

Patented Nov. 22, 1910.



Witnesses  
J. S. Freeman.  
R. P. Fishburne

By

Inventor  
H. G. Ballou,  
C. R. Parker, Attorney



# UNITED STATES PATENT OFFICE.

HARRY G. BALLOU, OF SEATTLE, WASHINGTON.

## CUTTER AND STAMPING DIE.

976,139.

Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed October 18, 1909. Serial No. 523,174.

*To all whom it may concern.*

Be it known that I, HARRY G. BALLOU, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Cutter and Stamping Dies, of which the following is a specification.

My invention relates to a device for stamping and pressing inscriptions upon metallic tags, such as key tags, baggage checks, and name plates.

An important object of my invention is to provide a device so constructed that both the stamping and pressing of the inscription upon the tag or the like will be accomplished by a continuous movement of the operating screw of the same.

A further object of my invention is to provide a device, which will cheapen and expedite the manufacture of such articles as key tags.

A still further object of my invention is to provide a device of the above character, the steel type of which may be removed and reset as desired.

My invention consists generally of a clamping frame, upon which are arranged the stamping and impression-producing means hereinafter to be described.

In the accompanying drawings forming a part of this specification, and in which like numeral references are used to designate like parts throughout the same, Figure 1 is a side view of my device complete. Fig. 2 is a plan view of the male die. Fig. 3 is a similar view of the female die. Fig. 4 is a similar view of the type-holding plate. Figs. 5 and 6 are vertical sectional views taken on lines 5—5 and 6—6 of Figs. 2 and 4 respectively. Fig. 7 is a central vertical sectional view of my device assembled, a portion of the clamping frame being broken away. Fig. 8 is a horizontal sectional view taken on line 8—8 of Fig. 1.

In the preferred embodiment of my invention the same comprises a clamping-frame having a square base 1, upon opposite sides of which are formed upstanding portions 2 and 3, which taper at their upper ends and are bent inwardly toward each other for engagement with a collar 4, through which operates a screw 5, carrying upon its upper end a wheel 6. The base 1, and side 3, are provided with forwardly extending flanges 7 and 8, respectively, whereby said

frame may be secured to a horizontal or vertical support, or may be secured to a horizontal support to assume a horizontal or vertical position.

The base 1, is provided near the portions 2 and 3, with cylindrical upstanding spaced aligned guide pins 9, which are adapted to be inserted within and extend through openings 10, provided upon a type holding plate 11, which is arranged directly upon the bottom 1. The type holding plate 11, is further provided with curved grooves 12 and a straight groove 13, the same being arranged centrally and upon the upper side of said plate 11, said grooves 12 and 13, being adapted for the reception of steel type, which are set and held therein in the usual manner, as is customary in printing. The type holding plate 11, is further provided upon its upper surface near one end of the grooves 12 and 13, with a vertically disposed punch pin 14, which extends downwardly within the plate 11, as shown at 15', in Fig. 7. It is also obvious by reference to Fig. 7, that the punch pin 14, extends upwardly beyond the steel type arranged within the grooves 13 and 12, for a purpose hereinafter to be explained. Arranged upon the upper surface of the type holding plate 11, is a square female die 15, provided with openings 16, which register with the openings 10 upon plate 11, and said openings 16, being adapted for the reception of the guide pins 9. The female die 15, is provided centrally thereof with an elliptical opening 17, having the same curvature as the grooves 12, upon plate 11, the said grooves 12 and punch pin 14 being adapted to be arranged within said elliptical opening, as clearly shown in Fig. 7. Slidably mounted upon the guide pins 9, above the female die 15, is a male die, comprising an upper square body portion 18 and a lower elliptical portion 19, adapted to fit snugly within the elliptical opening 17, of the female die. The male die is provided with a vertical opening 21, in alinement with and adapted to snugly receive the punch pin 14. The male die is further provided with a recess 22, centrally thereof, and upon its upper surface, for the reception of the lower end of the clamping screw 5.

In the use of my device a section of suitable material 23, which may be copper or any desired metal, is fed transversely of the members 2 and 3, and between the guide



pins 9, to assume a position between the male and female dies. The male die is then allowed to engage the upper surface of the section 23, as illustrated in Fig. 7. Upon  
 5 the rotation of the wheel 6, counter clock-wise, clamping screw 5, will engage the male die and force the portion 19, thereof into the opening 17, of the female die, thereby stamping out the shape of the tag. Upon  
 10 further rotation of wheel 6, the lower reduced portion 19, will force the tag stamped from the section 23, in contact with punching pin 14, whereby a hole will be punched within the same, by which the tag may be  
 15 secured to a desired object. The stamped tag is then pressed downwardly to engage the steel type, for pressing a desired inscription upon the same. I desire it to be understood that the type extends above the  
 20 type holding plate 11, just sufficiently to make impressions upon the tag and the tag will engage portions of said plate 11, between said type and prevent the said tag from being punctured by the type.  
 25 It is to be understood that the opening 17, of the female die and the depending portion 19, of the male die, may be of any desired shape, and I do not restrict myself to the arrangement of type herewith shown.  
 30 Having fully described my invention, I claim:

1. In a machine of the character described, a clamping frame, provided with guide pins, a plate mounted upon said clamping frame

and through which said guide pins pass, said 35 plate being provided with openings for the reception of type and with a punching pin, a female die mounted upon said guide pins, and in engagement with said plate, a male  
 40 die movably mounted upon said guide pins for coöperating with and guided by said female die, said male die being provided with an opening in alinement with said punching pin, and a clamping screw for actuating said male die. 45

2. In a machine of the character described, a base, upstanding arms formed upon the same, a clamping screw operating within an opening formed through the junctions of said arms, guide pins mounted upon said base, 50 a plate provided with openings to receive said guide pins disposed upon said base, said plate being provided with an opening to removably receive type, a female die provided with openings to receive said guide 55 pins therethrough, and disposed upon said plate, and a male die provided with openings to receive said guide pins and disposed to coöperate with and guided by said female die and be actuated by said clamping 60 screw.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY G. BALLOU.

Witnesses:

COLIS O. RADFORD,  
 N. H. BALLOU.