

E. J. WASHBURN.
 TYMPAN GAGE.
 APPLICATION FILED MAR. 29, 1919.

1,354,527.

Patented Oct. 5, 1920.

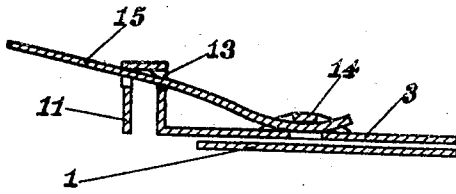


Fig. 3

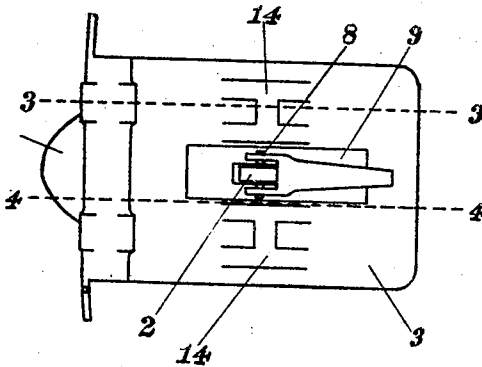


Fig. 1

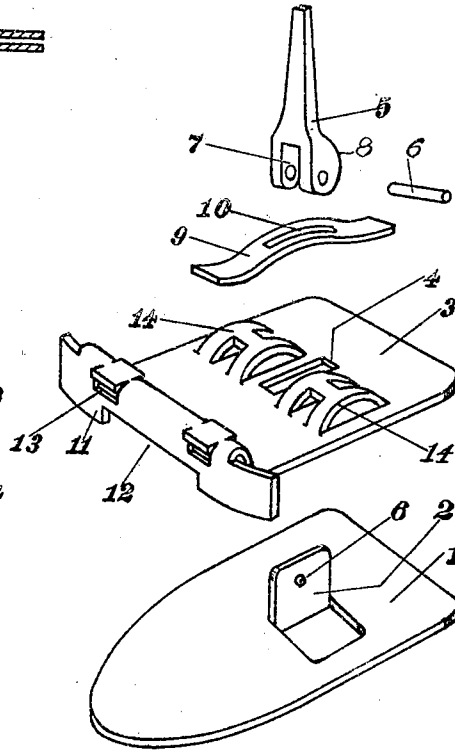


Fig. 2

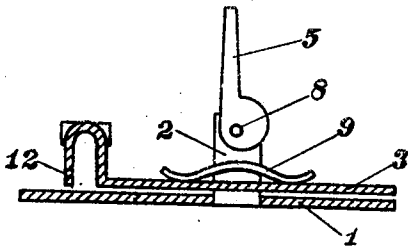


Fig. 4

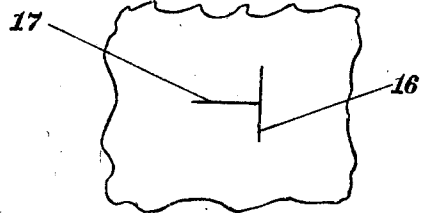


Fig. 5

INVENTOR.
Elmer J. Washburn
 BY *David T. Linn*
 his ATTORNEYS.

UNITED STATES PATENT OFFICE.

ELMER JAY WASHBURN, OF ROCHESTER, NEW YORK.

TYMPAN-GAGE.

1,354,527.

Specification of Letters Patent.

Patented Oct. 5, 1920.

Application filed March 29, 1919. Serial No. 286,114.

To all whom it may concern:

Be it known that I, ELMER J. WASHBURN, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Tympan-Gages, of which the following is a specification.

The present invention relates to tympan feed gages for printing presses and more particularly to the type which is secured to the tympan by slitting the same so that the gage may be partially introduced into the slit for the purpose of clamping the tympan, an object of this invention being to simplify the construction of the gage for the purpose of reducing the cost of the manufacture thereof while at the same time obtaining a more effective clamping action of the tympan with greater facility in attaching the gage.

To this and other ends the invention consists of certain parts and combinations of parts, all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings:

Figure 1 is a plan view of a tympan gage constructed in accordance with the present invention;

Fig. 2 is a perspective view showing the parts of the gage separated or detached from each other;

Fig. 3 is a section on the line 3—3, Fig. 1;

Fig. 4 is a section on the line 4—4, Fig. 1; and

Fig. 5 is a detail view of the tympan slit.

In the illustrated embodiment of the invention, the gage comprises a lower clamping plate or member 1 made in this instance from sheet metal and having a post 2 extending upwardly therefrom, said post preferably being in the form of a tongue cut from the stock of a metal plate and bent upwardly providing a post of non-circular cross section. Cooperating with the lower clamping plate is an upper clamping plate 3 also preferably formed of sheet metal and provided with a slot or opening 4 of non-circular cross section conforming to the cross section of the post 2, thus permitting the clamping plates 1 and 3 to move each other while preventing any turning or lateral movement of the plates. Upon the post 2 a clamping device 5 is mounted, this clamping device in this instance being in the form of a cam lever which preferably is bifurcated

at 7 so as to straddle the post and turn on the pivot 6, the arms of the bifurcation being provided with cam surfaces 8. This cam lever coöperates with a bow or leaf spring 9 which is slotted at 10 between its ends to fit about the post 2 so as to be held against turning on the post, its ends bearing against the upper surface of the upper clamping plate 3 on opposite sides of the post 2. It is apparent that when the cam lever 5 is swung to an upper position, the plates will be permitted to separate while if the clamping lever is swung to its lower position, pressure will be applied to the leaf spring 9 and the plates 1 and 3 will be held together with yielding pressure.

Along one edge of the plate, the latter is provided with a stop surface 11 formed by bending the metal into inverted U shape in cross section, one edge of one of the arms being notched at 12 to receive the projecting portion of the lower clamping plate 1. The bend is also provided with two pairs of openings 13, one member of each pair of openings being provided in one arm of the bend and the other member being provided in the other arm of the bend and registering with the first mentioned member. The top clamping plate is preferably also provided in rear of the bend and on opposite sides of the post 2 with guides 14 formed in this instance by cutting the metal to provide two H shaped portions pressed upwardly in the manner illustrated. These guides 14 with the guiding surfaces formed by the walls of the openings 13 are adapted to receive a stripper 15 which in this instance is in the form of a long narrow strip of thin flexible metal insertible through either pair of openings 13 and one of the guides 14 and acting to prevent the work from being lifted by the printing surface. By this arrangement the stripper may be projected more or less from the clamping member and may also be shifted on the clamping member so that it will not interfere with the printed matter.

In attaching the clamp the tympan is provided with a T slit as shown in Fig. 5. The lower clamp is introduced into the portion 16 of the slit and the post is caused to enter the portion 17 of the slit so that the clamp may engage the tympan on both sides of the post. The gage may be readily made from sheet metal and its clamping members are separate from each other being adjustably connected yet held against relative turning

by a post which is of noncircular cross section. A separate spring is provided which is mounted on the post and is also held against turning by the noncircular cross section of the post. The clamping device is in the form of a cam lever permanently secured to the post so that the danger of losing the clamping device is obviated. The stripping device is not only adjustable on the clamp but it also may be shifted to either one of two positions.

What I claim as my invention and desire to secure by Letters Patent is:

1. A gage of the type described comprising a lower clamping plate formed with a tapered end and a plane top face and two side edges merging into said tapered end, a post projecting from said plate substantially midway of said side edges to provide clamping faces on opposite sides of the post, and an upper clamping plate having a stop shoulder and a plane under surface to cooperate with the top face of the lower clamping plate, said upper clamping plate being separate from the lower clamping plate and interlocking with the post to prevent turning of the upper plate on the post, thereby providing for clamping the tympan cover between the plates on opposite sides of the post.

2. A gage of the type described comprising a lower clamping plate formed with a tapered end, a plane top face and two side edges merging into said tapered end, a post projecting from said plate and having an elongated cross section, the longitudinal axis of which is in a line central between the two side edges, and an upper clamping plate having a stop shoulder and a plane under surface to cooperate with the top face of the lower clamping plate, said upper clamp-

ing member being separate from the lower clamping plate and having an elongated slot receiving the post and preventing the turning of the upper clamping member on the post, thereby providing for clamping the tympan cover between the plates on opposite sides of the post.

3. A gage of the type described comprising a lower clamping plate formed with a tapered end, a plane top face and two side edges merging into said tapered end, a post projecting from said plate and having an elongated cross section, the longitudinal axis of which is in a line central between the two side edges, an upper clamping plate having a stop shoulder and a plane under surface to cooperate with the top face of the lower clamping plate, said upper clamping member being separate from the lower clamping plate and having an elongated slot receiving the post and preventing the turning of the upper clamping member on the post, thereby providing for clamping the tympan cover between the plates on opposite sides of the post, a leaf spring provided with a slot receiving the post and having its ends bearing on the upper plate in front and in rear of the post, and a bifurcated clamping lever pivotally supported on the post and having cam portions on opposite sides of the post engaging the spring on opposite sides of the slot.

4. A gage of the type described comprising an upper clamping plate, a lower clamping plate having a post projecting therefrom through the upper plate, the upper plate having guides on opposite sides of the post, a clamping device arranged to operate on the post, and a guard insertible in the guides in either side.

ELMER JAY WASHBURN.