No. 764,659. PATENTED JULY 12, 1904.

C. W. COLEMAN.

CLAMPING DEVICE.

APPLICATION FILED OCT. 5, 1903.

NO MODEL.

Fig. 1.

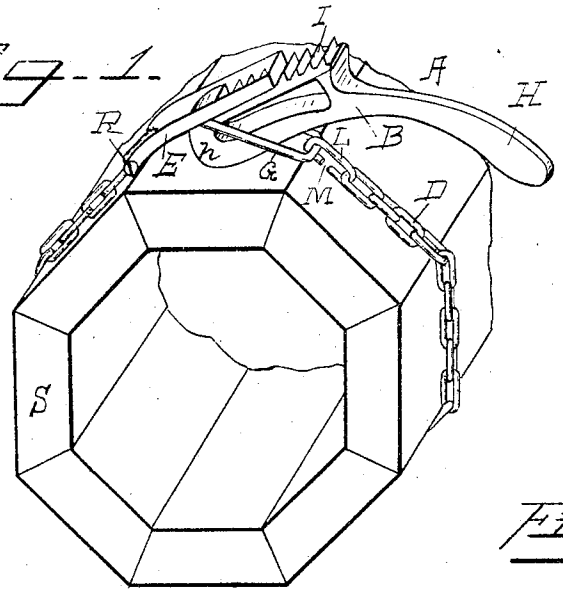


Fig. 2

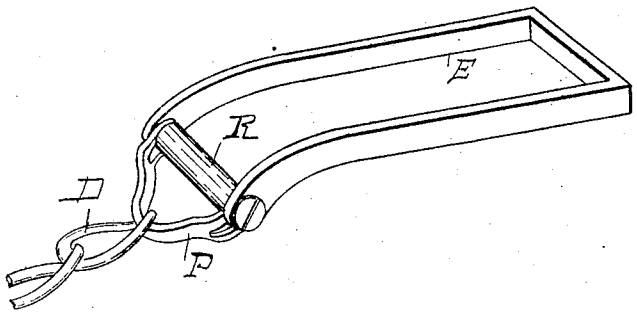
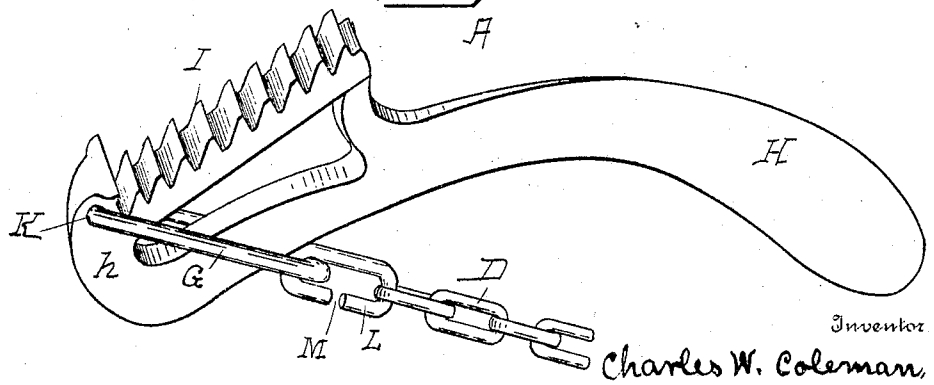


Fig. 3



Witnesses

E. E. Cady

M. R. Hemmer

Inventor

Charles W. Coleman,

By M. M. Cady

Attorney

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UNITED STATES PATENT OFFICE.

CHARLES W. COLEMAN, OF DUBUQUE, IOWA.

CLAMPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 764,659, dated July 12, 1904.

Application filed October 5, 1903. Serial No. 175,751. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. COLEMAN, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented new and useful Improvements in Clamping Devices, of which the following is a specification.

The object of my invention is to provide a clamp for use in the construction of stave-columns and the like which shall be quickly adjustable not only to columns of different sizes, but also to the variant size of the same column.

It consists in a binder of sufficient length to compass a column of the largest size to which it is to be applied, to one end of which is attached a pawl-link.

It further consists in a lever provided with a handle and means of adjustment thereon with which the pawl-link engages; and it also consists in a link pivotally attached to the lever and adjustably connected with the binder.

For a better understanding of the manner of construction and its mode of operation attention is called to the following specification, when read in connection with the drawings accompanying the same and forming a part hereof.

Figure 1 is a perspective view of the device in position on a column. Fig. 2 is a perspective view of a portion of the binder and pawl-link attached. Fig. 3 is a perspective view of the lever with the link and a portion of the binder attached to the link.

Like letters of reference denote corresponding parts in each of the drawings.

Referring to the drawings, A designates the clamp; B, the lever; D, the binder; E, the pawl-link, and G the link attached to the lever. The lever B, with an arm or handle H, is provided on one side near the end opposite the handle with means for adjustment, preferably ratchet-teeth I, somewhat raised from the body of the lever. The inner end *h* of the lever is formed into an elongated curve and provided with an opening K, in which a link G is inserted. The end of the lever at its enlarged portion is curved abruptly upon its lower face, thereby providing a cam-face *h*, acting as a cam upon actuation of the lever to tighten the binder. To the outer end of the link G is attached an open link L and is provided with an opening M, through which the binder is removably and adjustably attached to the link L by one of the links of the binder for the purposes presently to appear. The binder may be of any material and construction; but it is preferably a chain of twisted links. To one end of this binder is attached a pawl-link E. This link is preferably made of a metal band fashioned into rectangular form and also bent longitudinally the better to conform to the curve of the column and is attached to the binder by a link P and a bolt R, passing through the link P.

The manner in which my device is conveniently used is substantially as follows: Sufficient of the binder D is taken to wrap around the column, and one of the links of the binder is brought into engagement with the link L through the opening M, and the pawl-link E is brought into engagement with one of the teeth I on the lever. Then the operator grasps the handle H of the lever and presses it downward and backward, with the inner end *h* of the lever resting on the column. As the link G is attached to the upper part of cam end of the lever, when the lever is forced downward the end of the lever will be forced through the link and draw the binder taut around the column S. If the column tapers and it is desired to attach the clamp to the part of less dimension, then either another link of the binder is brought into engagement with the link L or the link E is brought into engagement with another of the links I farther up on the lever.

It will be seen that by this mode of construction the device can readily be adapted for adjustment to columns of large variation in sizes and can be brought taut almost instantaneously and without the aid of a skilled mechanic, thus greatly increasing the output of columns and cheapening the cost of productions over the methods of adjustment by means of screws.

It is manifest that details may be departed from in the construction of my device and still be within the spirit of my invention.

Having now described my invention, what I claim is—

1. A clamping device comprising a linked binder having an open link therein, to permit of adjustment in the length of the binder, a lever having a pivotal connection with the binder, said lever being provided with an enlargement thereon curved upon its lower face to form a cam, a series of teeth arranged upon the upper portion of said enlargement, and means carried by the binder adapted to engage said teeth forming a second adjusting means therewith for the binder, substantially as set forth.

2. A device of the character described comprising a lever having an enlarged portion integral therewith, said portion having its lower face curved to form a cam, and being provided with an upper flattened surface having a series of teeth thereon, and a binder comprising a series of links, a pawl-link at one end thereof adapted to engage the said teeth, an open link secured to said links, and a link engaging the open link and pivotally mounted in said lever above the cam and adjacent the teeth, substantially as and for the purpose described.

3. In a device of the type set forth, the combination with a lever provided with a cam-face and having teeth mounted upon the upper portion thereof, of a linked binder having a pawl-link to engage the teeth, and an open link at the other end of the binder having means connecting the same with the lever, substantially as set forth.

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

CHARLES W. COLEMAN.

Witnesses:
M. M. CADY,
K. M. CADY.