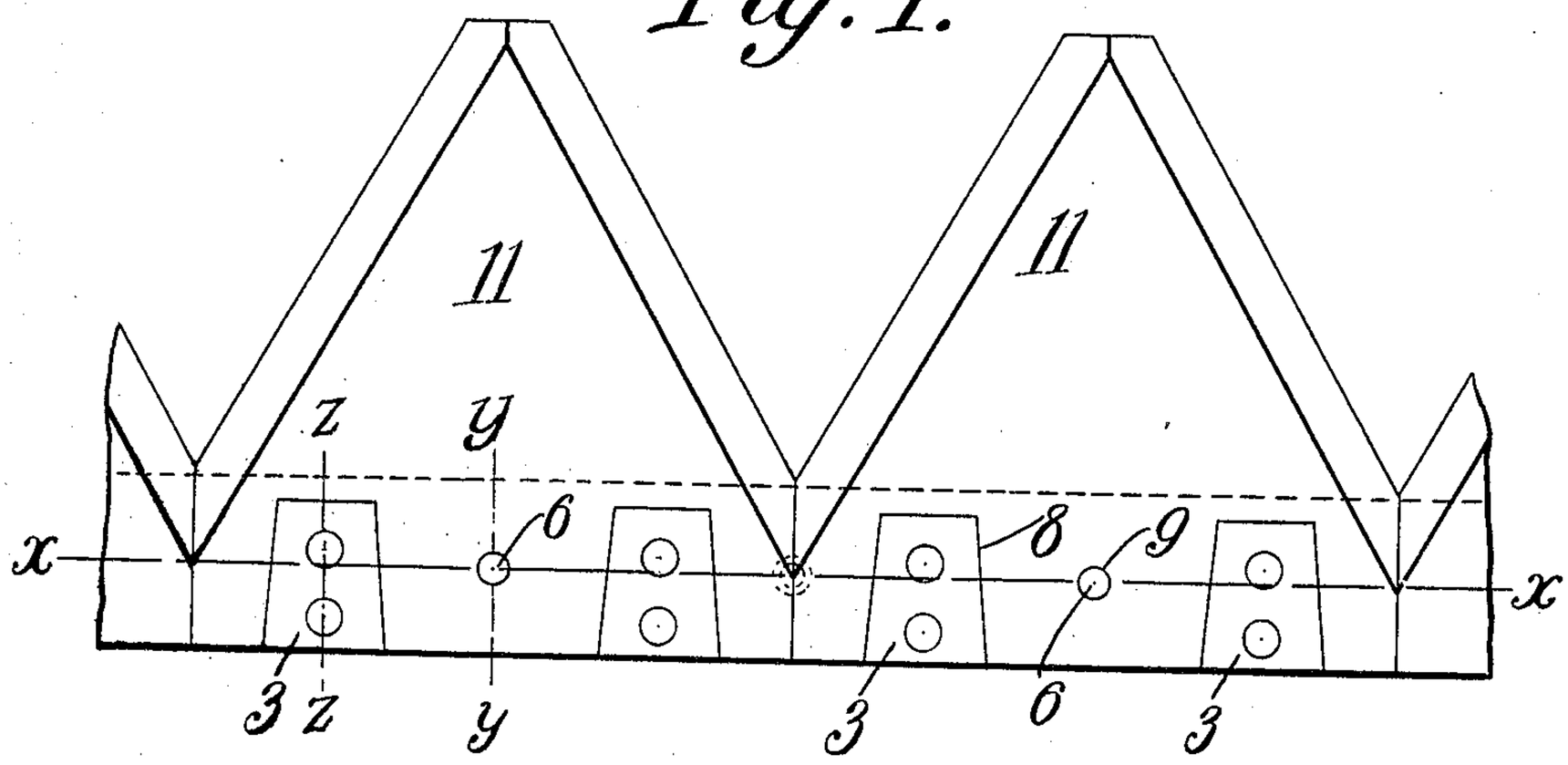
No. 885,365. PATENTED APR. 21, 1908.

B. F. McELWEE.

CUTTER BAR.

APPLICATION FILED NOV. 2, 1907.

Fig. 1.



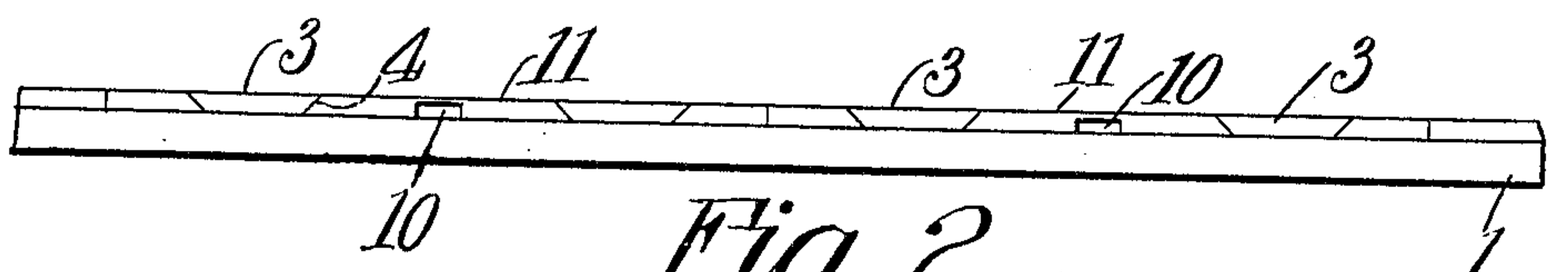


Fig. 2.

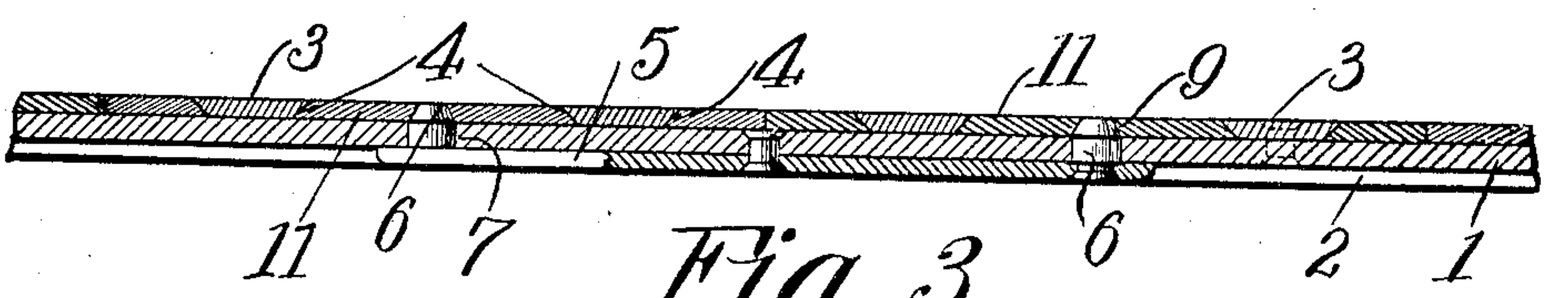


Fig. 3.

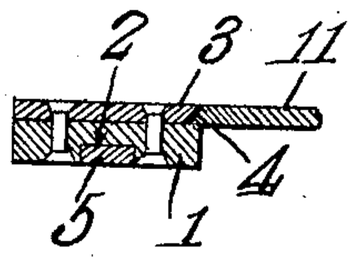


Fig. 5.

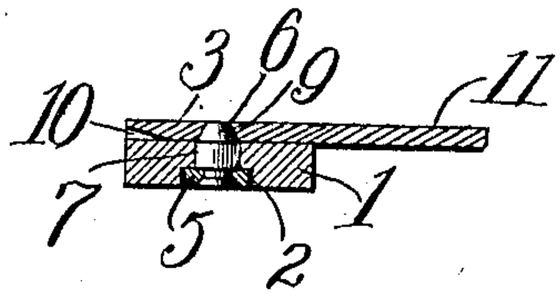


Fig. 4.

Witnesses

E. J. Stewart

O. Daniels

Inventor

Bernard F. McElwee.

By Cushman & Co.

Attorneys

UNITED STATES PATENT OFFICE.

BERNARD F. McELWEE, OF DUNMORE, WEST VIRGINIA.

CUTTER-BAR.

No. 885,365. Specification of Letters Patent. Patented April 21, 1908.

Application filed November 2, 1907. Serial No. 400,376.

To all whom it may concern:

Be it known that I, BERNARD F. McELWEE, a citizen of the United States, residing at Dunmore, in the county of Pocahontas and State of West Virginia, have invented a new and useful Cutter-Bar, of which the following is a specification.

This invention relates to cutter bars and more particularly to means whereby teeth may be detachably secured to the body strip of the cutter bar, said means being durable and efficient and designed to hold the teeth rigidly in place upon the body strip.

The device is especially designed as an improvement upon the construction shown in patent No. 453,203, granted to me on June 2, 1891.

Heretofore it has been customary to provide a pair of latch pins for each tooth, the pins being spring actuated so as to automatically engage the tooth.

One of the objects of the present invention is to simplify the construction of devices of this character by providing a single latch pin for each tooth, the pins of every two adjoining teeth being provided with a mutual actuating spring.

Another object of the invention is to provide simple means whereby each tooth may be tightly wedged in position and thus firmly held.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a plan view of a portion of a cutter bar embodying the present improvements. Fig. 2 is a rear elevation of the parts shown in Fig. 1. Fig. 3 is a section on line *x*—*x*, Fig. 1. Fig. 4 is a section on line *y*—*y*, Fig. 1. Fig. 5 is a section on line *z*—*z*, Fig. 1.

Referring to the figures by characters of reference 1 designates the body of the device, the same being in the form of an elongated bar or strip having a longitudinal channel 2 in its lower face while upon its upper face are transversely extending retaining plates 3 riveted or otherwise secured in place and these plates taper toward their forward ends, the longitudinal and front edges of the plates being undercut or beveled as indicated at 4.

Secured within the channel 2 are a plurality of spring strips 5 only one of which has been shown in the drawings. Each strip is secured at its center to the bar 1 by means of a rivet or other suitable device disposed between two of the retaining plates 3 and upstanding from the end portions of each spring strip 5 are latch pins 6 movably mounted in openings 7 extending through the bar 1.

The teeth used in connection with the bar are all of the same size and contour and those portions thereof disposed to rest upon the bar are provided with angular slots or recesses 8, the edges of which are beveled so that when the teeth are slid transversely of the bar 1 the retaining plates 3 will assume positions within the recesses or slots 8 and will bind against the walls thereof and lap them. As indicated in the drawings two of these retaining plates are provided for each tooth and the opening 7 between said plates is designed to register with a corresponding opening 9 formed within the tooth at a point between the recesses 8. The tooth is undercut or beveled at the center of its rear edge as indicated at 10 so that when it is moved in the direction of the plates 3 and pin 6 said beveled portion will depress the pin and permit the tooth to become seated in engagement with the plates 3.

The teeth, which have been indicated generally by the numeral 11, are designed to abut above the bar 1 and the retaining plates 3 and the upper ends of pins 6 are all preferably flush with the upper faces of the teeth. The two pins 6 of each spring 5 are designed to engage two adjoining teeth and it will therefore be apparent that only half as many springs are necessary as there are teeth upon the bar. The construction of the cutter bar is thus greatly simplified. Moreover, importance is attached to the provision of tapered retaining plates having edges designed to lap all of the walls of the slots or notches 8 which are designed to wedge under the edges of the retaining plates and thus become firmly bound in place. By providing the beveled undercut portion 10 it does not become necessary to bevel the ends of the pins 6 and said ends can lie flush with the upper faces of the teeth so that a perfectly smooth surface is presented throughout the length of the cutter bar. Any one of the teeth can be readily removed by depressing the pin 6 engaging it and sliding the tooth out of en-

gagement with the retaining plates 3. This operation can be effected by the use of tools either of ordinary or of special construction.

What is claimed is:

The combination with a cutter bar having tapered retaining plates thereon arranged in pairs, each of said plates having beveled side and front edges; of teeth removably mounted upon the bar, each tooth having recesses for the reception of one pair of retaining plates, said plates being designed to lap and bind upon all of the walls of the recesses, a latch pin engaging each tooth and extending through the bar, the ends of said pins being tapered, and a spring secured to the bar and common to pins of two adjoining teeth for holding said pins normally in engagement with the teeth.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

BERNARD F. McELWEE.

Witnesses:
JAS. M. WALKER,
M. J. WARRINER.