

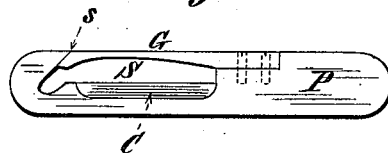
(No Model.)

A. A. LOW.  
TWINE CUTTER.

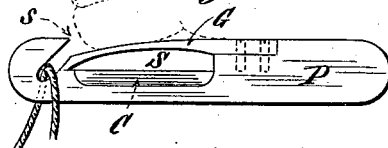
No. 419,273.

Patented Jan. 14, 1890.

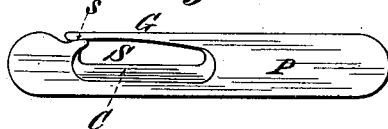
*Fig. 1.*



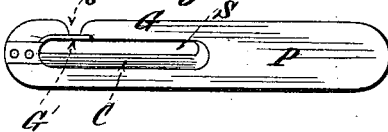
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses:  
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Abbot Augustus Low  
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# UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF BROOKLYN, NEW YORK.

## TWINE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 419,273, dated January 14, 1890.

Application filed May 11, 1889. Serial No. 310,418. (No model.)

### *To all whom it may concern:*

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Cord-Cutters, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention relates to the class of cutters in which the cutting-blade is designed to be protected from contact with extraneous objects by a guard extending in front of the cutting-edge, as in my applications Serial No. 293,514, filed December 13, 1888; Serial No. 296,445, filed January 15, 1889, and Serial No. 304,531, filed March 23, 1889, by reference to which it will be seen that a lateral opening or entrance to the slot formed by the blade upon one side and the guard upon the other is formed for the admission of the cord. While the protection afforded to the cutting-edge by the guard in the devices referred to is ample under ordinary circumstances of use, I find that in certain contingencies small articles are liable to obtrude themselves into the cutter-slot through its mouth or entrance, causing inconvenience and annoyance, and in some cases injury to the blade or the intruding article.

The object of my present invention is to obviate all danger of accidental contact with the cutting-blade and at the same time maintain the simplicity of constructiveness of the device and its effectiveness and convenience in use.

The invention consists, essentially, in automatically closing the entrance to the slot in front of the cutting-blade by spring-pressure, and the means for thus utilizing the elasticity of a spring may obviously be varied in detail without deviating from the spirit and intent of my invention, as will be seen by reference to the accompanying drawings, in which—

Figures 1 and 2 represent the guard itself as made elastic to bend inward to permit of the entrance of the cord, as shown in Fig. 2, its resilience, when pressure is removed, re-

turning it to its normal position, as in Fig. 1. Fig. 3 shows the guard in the form of a spring which opens outward to admit the cord, and Figs. 4 and 5 represent the guard as rigid, as heretofore constructed, and the entrance to the cutter-slot closed by a flat spring attached to the device.

It will be seen that in any case what may be practically designated as an "automatically-closing gate" is attained, by which the cutter-slot is effectually closed and guarded. The cutting-blade C is formed or inserted in the body of the plate P, and is protected by the guard G, which extends in a substantially-parallel line in front and creates the cutter-slot S. Thus far the cutting device is substantially the same in construction as those hereinbefore referred to. Provision for closing the slot S automatically may either be made by making the guard G itself elastic, as shown in Figs. 1, 2, and 3, or an independent spring G' may be employed and the guard remain rigid, as heretofore, as illustrated in Figs. 4 and 5. When the spring-gate G' is made independent and attached to the plate P, I curve the side walls of the entrance s, as shown in Fig. 4, to facilitate the entrance of the cord.

An incidental feature of my invention consists in forming the entrance s to the cutter-slot S beyond the cutter-blade C, as shown in Figs. 1 and 2, so as to obviate all danger of contact between the end of the said spring-guard when depressed and the cutting-edge, and to also avoid the immediate contact with the blade of the cord or other object introduced, a sort of ante-chamber or intermediate lock being created when the spring-gate is open, as shown in Fig. 2, which bars contact with the cutting-edge until the gate has returned to its normal position. It will thus be seen that I guard the cutter C under all conditions, even when the cutter-slot is open, so that it is practically impossible for foreign matter to reach the blade by accident.

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

1. In a cutting implement substantially such as described, the plate P, formed with the rigid interior cutting-edge C and slot S, having an automatically-closing entrance, and

the guard G, the whole combined and arranged substantially in the manner and for the purpose set forth.

2. In a cutting implement substantially  
5 such as described, the plate P, formed with the rigid interior cutting-edge C, slot S, and flexible guard G, for automatically closing the said slot S, the whole combined and arranged substantially in the manner and for  
10 the purpose set forth.

3. In a cutting implement substantially

such as described, the plate P, formed with the rigid interior cutting-edge C, slot S, provided with the automatically-closing entrance situated beyond the cutting-blade C, and the  
15 guard G, the whole combined and arranged substantially in the manner and for the purpose described.

ABBOT AUGUSTUS LOW.

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