(No Model.)

L. WIMMER.

YARN NIPPER.

No. 463,566. Patented Nov. 17, 1891.

Fig. 1.

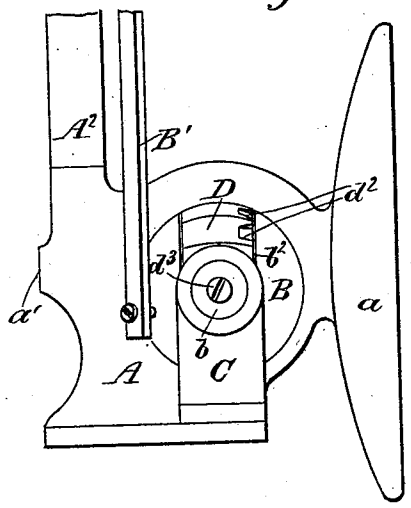


Fig. 2.

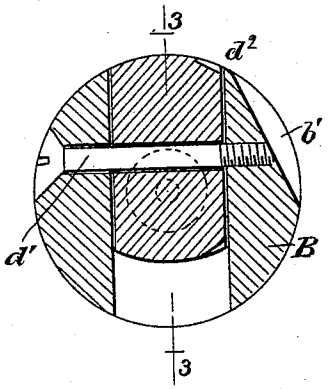


Fig. 3.

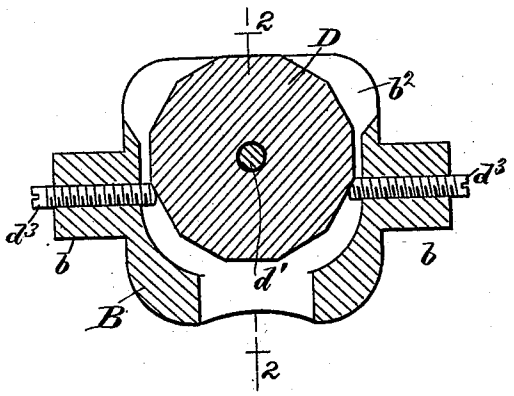


Fig. 4.

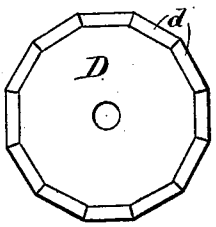
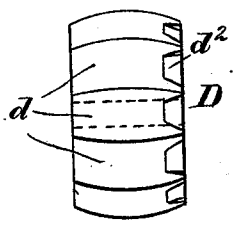


Fig. 5.



WITNESSES:

J. A. Criswell.

C. Sedgwick

INVENTOR:

L. Wimmer

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS WIMMER, OF ELIZABETHPORT, NEW JERSEY, ASSIGNOR OF ONE-HALF TO ELIAS D. SMITH, OF NEW YORK, N. Y.

YARN-NIPPERS.

SPECIFICATION forming part of Letters Patent No. 463,566, dated November 17, 1891.

Application filed April 9, 1891. Serial No. 388,302. (No model.)

To all whom it may concern:

Be it known that I, LOUIS WIMMER, of Elizabethport, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Yarn-Nippers, of which the following is a full, clear, and exact description.

The invention relates to the nippers or nipper-heads of yarn or twine spinning machines. Heretofore certain of these nipper-heads included a nipper-die fitted in the head and over which the yarn was guided in passing through the said head, and such nipper-die was provided with a wear plate or block, which, when it became worn by the sliver, was removed and replaced by a new wear-plate.

My present invention is designed to avoid the delay and trouble in renewing such wear-plate.

To this end the invention consists in a nipper-die provided with a movable wear-block having several wear-faces that may be successively brought into the path of the sliver and receive the wear thereof as the preceding one becomes worn, all as hereinafter particularly described, and defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a nipper-head embodying my invention. Fig. 2 is a vertical sectional elevation of the nipper-die removed from the head, the section being taken on line 2 2, Fig. 3. Fig. 3 is a like view on line 3 3, Fig. 2. Fig. 4 is a side elevation of the movable wear-block, and Fig. 5 is an edge view of such wear-block.

My invention relates solely to the wear-block, as shown best in Figs. 4 and 5; but in order that its purpose may be fully understood, I have shown it in connection with the nipper-head with which it is employed. Said nipper-head (indicated by the letter A) is provided with a trumpet-mouth *a*, into which the slivers pass, emerging at the rear at the point *a'*. In the body of the nipper-head A the nipper-die B is fitted, the same being provided with trunnions *b*, resting in suitable bearings or pillow-blocks at the sides of the head A, one of such pillow-blocks being shown in Fig. 1 and indicated by the letter C.

The die B is normally held against turning by the rods or arms B', which are connected with said die, and in practice are sustained by a spring fitted in the standard A^2, projecting from the head A.

In operation the sliver in passing through the nipper-head passes over the top of the die B, and should a knot in the sliver enter the head it will partially rotate the die and the sliver be thus arrested, the knot being received in the groove *b'*.

All the above-mentioned parts are common in yarn-nippers and need no further description. In my invention, however, the die B, instead of being provided with the usual wear plate or block, is provided with a movable block D, having a series of wear-surfaces *d*. The wear-block D is mounted in a recess b^2 of the die B, and is mounted on an axial pin *d'*, the block being of polygonal form in its periphery, preferably twelve-sided, each of such twelve sides forming a wear-face *d*. The letter d^2 indicates a notch in each surface at the forward end thereof, corresponding to the usual notch in the single wear-surface of the old form of die. With this construction it will be seen that as one surface *d* becomes so worn as to no longer exert the proper tension on the sliver, the wear-block D is merely given a slight turn by the attendant to bring the next succeeding wear-surface *d* in line with the passage through the head.

The block D is held in the adjusted position by set-screws d^3, which are fitted in threaded apertures in the trunnions *b*, the inner ends of the set-screws bearing against opposed faces of the block D. Thus the delay of renewing the usual wear-plate is avoided and great economy in time and labor results, with considerable saving in expense.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A die for yarn-nippers, having an adjustable wear-block fitted therein and movable therein to bring a new wear-surface into position, substantially as described.

2. A die for yarn-nippers, having a many-sided wear-block fitted therein and capable of rotary movement to bring successive faces into position, substantially as described.

LOUIS WIMMER.

Witnesses:
BERNARD DONAHOE,
THOMAS KENELY, Jr.