

(No Model.)

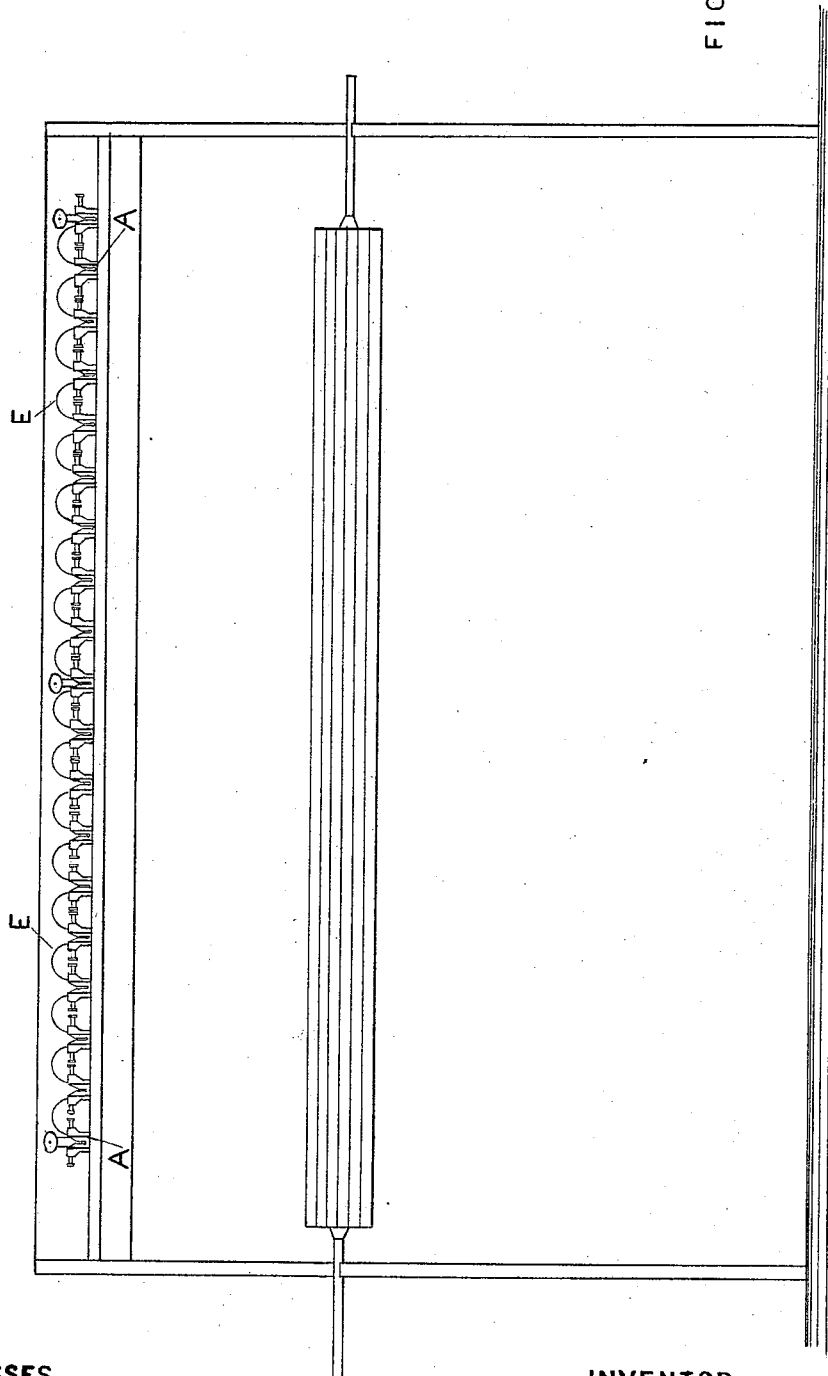
2 Sheets—Sheet 1.

M. M. GREEVES.
CLEARER FOR YARNS.

No. 490,347.

Patented Jan. 24, 1893.

FIG. 1.



WITNESSES

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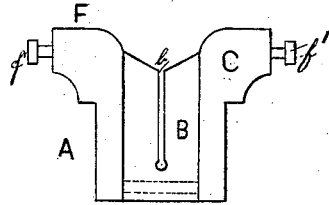


FIG. 3.

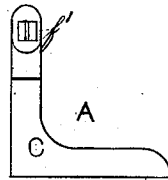


FIG. 4.

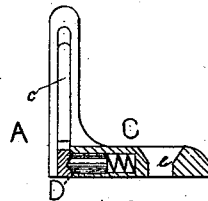


FIG. 6.

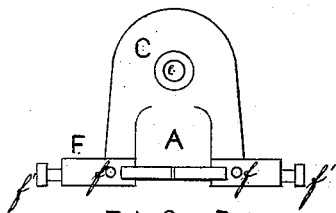


FIG. 5.

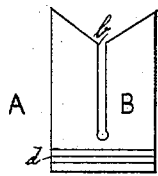


FIG. 8.

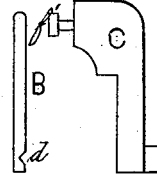


FIG. 9.

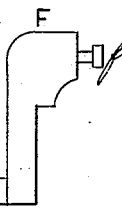


FIG. 7.

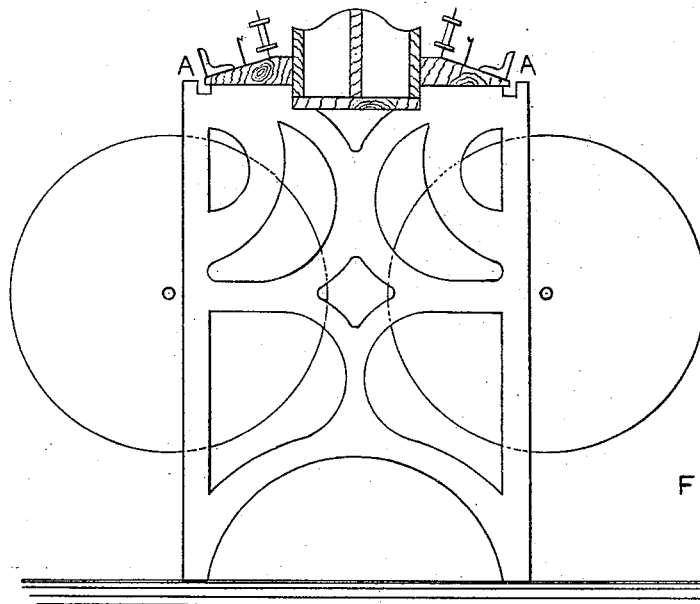


FIG. 2.

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UNITED STATES PATENT OFFICE.

MALCOM MACGREGOR GREEVES, OF BELFAST, IRELAND.

CLEARER FOR YARNS.

SPECIFICATION forming part of Letters Patent No. 490,347, dated January 24, 1893.

Application filed June 25, 1892. Serial No. 437,977. (No model.)

To all whom it may concern:

Be it known that I, MALCOM MACGREGOR GREEVES, a subject of the Queen of Great Britain, residing at Belfast, in the county of Antrim, Ireland, have invented certain new and useful Improvements in Clearers for Yarns, of which the following is a specification.

In the reeling or winding of yarn from flax it is customary to pass the material through a device called a clearer to remove lumps, &c., therefrom. These have hitherto been made in the form of a bracket to be screwed or bolted to the frame with a thin slot or saw cut the size of which is regulated and adjusted by means of a set screw passing through from one side to the other. This form is objectionable as it is difficult to keep the two jaws or sides of the slot parallel, and to set them the required distance apart, besides being liable to be tampered with by the workers causing loss of time in adjusting the slot for each change in thickness or lea of yarn.

My invention consists essentially in the combination of a detachable or movable clearer with a holder or bracket in which it can be easily fixed and from which it can be quickly removed and replaced by another of different size.

It will be fully described with reference to the annexed drawings in which sufficient of a reeling frame is shown to illustrate the invention.

Figure 1 is a front elevation of a reeling frame showing the invention in position thereon. Fig. 2 is an end elevation of the same. Fig. 3 is a front elevation of my improved clearer drawn to an enlarged scale. Fig. 4 is a side elevation of the same. Fig. 5 is a plan. Fig. 6 is a side elevation in section. Fig. 7 is a front elevation of the bracket with the clearer plate removed. Fig. 8 is a front elevation of the clearer plate. Fig. 9 is a side elevation of the clearer plate.

I construct the clearer A with a removable plate B and bracket or holder C. The removable clearer plate B is formed with a slit or saw cut *b* of the required gage extending from top to bottom or nearly so. The removable clearer plate B fits into the bracket or

holder C provided with a groove *c* or other receptacle to receive it and at the bottom of the bracket C I place a small spring bolt or catch D and provide in the clearer plate B a groove or nick *d* with which the bolt D engages and secures the plate in position. Instead of a spring catch a screw or other device may be used to secure the clearer in its position in the holder.

The clearer A is affixed to the front of the machine by a screw or bolt passing through a hole *e* in the bracket C or in other convenient manner and between each of the clearers is fitted a guide wire E. The wire E fits into holes *f* in the side lugs F and are secured therein by the setscrews *f'*.

The clearer plate B is removable and a number of plates are provided with slits or cuts of different size or gage. By this arrangement no adjustment of the slot or slit in the clearer is required as a clearer of proper size will be placed in the holder; no tampering with the clearer will be possible by the workers as the slot is of a fixed size; and the clearers can be readily changed from one size to another without loss of time.

What I claim and desire to protect by Letters Patent is:—

1. In a yarn clearer A for reeling and winding machines the combination with a removable clearer plate B provided with a slit *b* of the desired size, of the fixed bracket holder C provided with grooves *c* and the spring bolt D which engages with and secures the clearer plate substantially as described.

2. In a yarn clearer A the combination of the removable clearer plate B provided with the slit *b* and groove *d* the fixed bracket holder C provided with grooves *c* lugs F and holes *f* the spring bolt D which engages with and secures the clearer plate and the guide wires E which guide or direct the yarn to the slits *b* all substantially as described and shown.

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

M. MACGREGOR GREEVES.

Witnesses:

GEO. R. GREEVES,

F. M. GREEVES.