Sept. 30, 1924.

J. W. NASMITH

1,510,098

COMBING MACHINE

Filed March 21, 1923

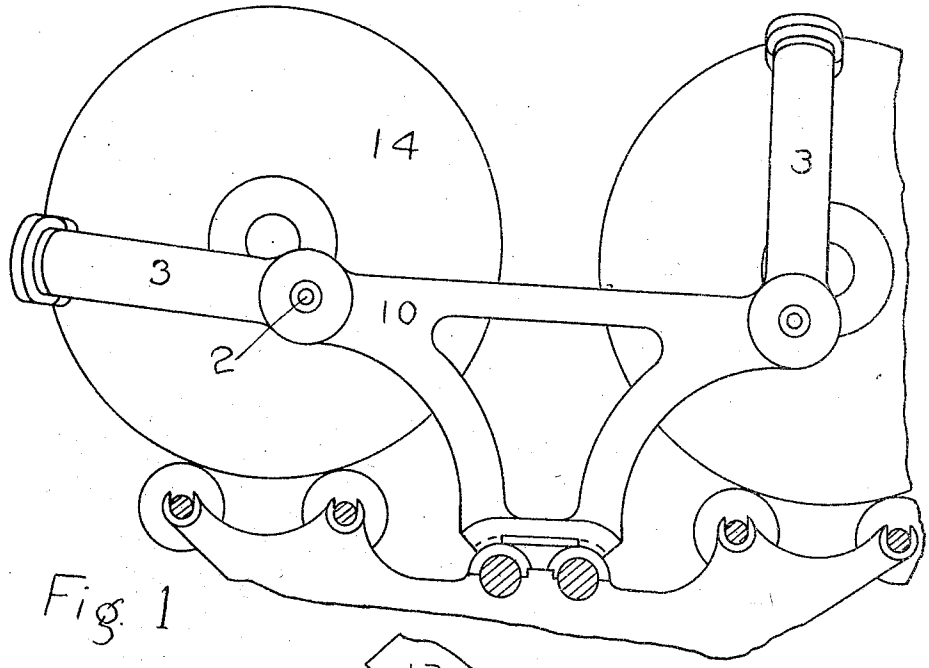



Fig. 1

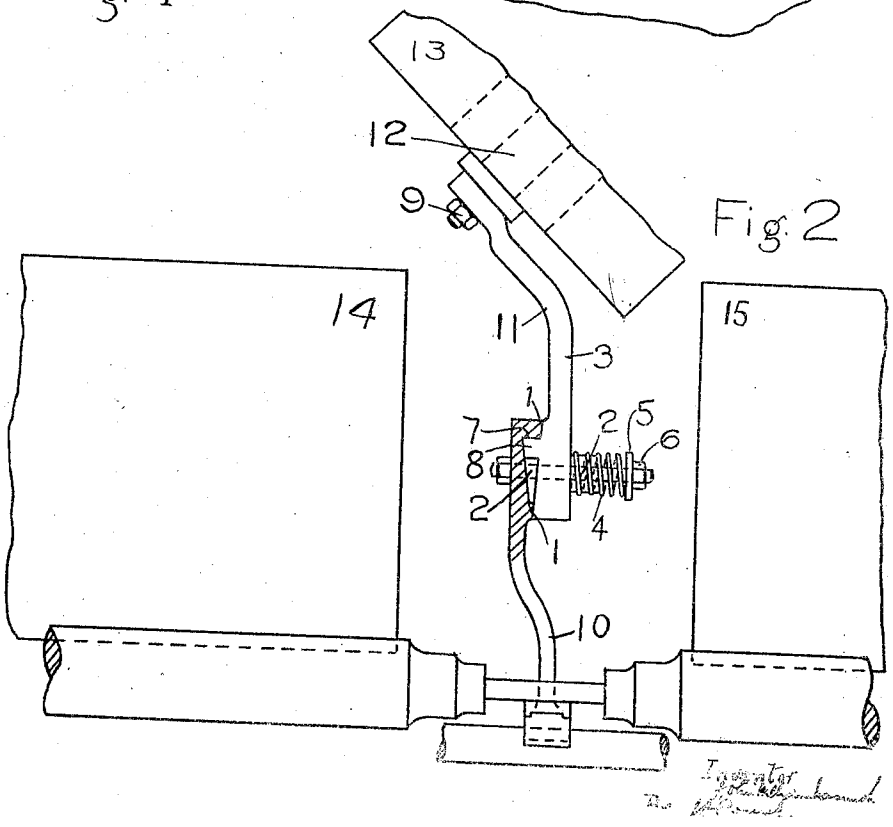



Fig. 2

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# UNITED STATES PATENT OFFICE.

JOHN W. NASMITH, OF MANCHESTER, ENGLAND.

## COMBING MACHINE.

Application filed March 21, 1923. Serial No. 626,660.

*To all whom it may concern:*

Be it known that I, JOHN WILLIAM NASMITH, a subject of the King of Great Britain, of Heaton-Mersey, Manchester, England, have invented certain new and useful Improvements in Combing Machines, of which the following is a specification.

In combing machines the creel or receptacle for the reserve laps is necessarily placed above the machine and the attendant, usually a girl or woman, has to lift the heavy reserve lap considerably above her head to place it on the creel and again when taking it down to place it in working position she has to sustain the weight of the heavy lap, usually with one hand, to "ready" it, that is to find the end and straighten it out before placing it in position, much ruffling of the evenly laid fibres and considerable waste resulting from the inconvenience and effort beyond the strength of the operative.

The object of the present invention is to so construct the creel or lap carrier that it can be brought down to within easy reach of the operative and approximately on a level with the working position on the machine and thus to obviate completely the necessity of lifting the heavy lap above the head and to so arrange it that the receptacle sustains the whole weight of the lap at the same time permitting it to be turned on its center whilst the operative "readies" it, finds the end and prepares it to be put in proper working position on the machine. In this way ruffling of the fibres and waste is prevented and only a slight effort is required to remove the lap from the receptacle and place it in working position on the machine.

A sheet of drawings is appended which will make the invention clear.

Fig. 1 is an end elevation of the apparatus applied to a double comber and Fig. 2 is a front view of the same showing one side of the apparatus on the double machine.

A circular vertical facing 1 Fig. 2 is formed on the frame 10 of the machine, which projects forward between two laps 14 and 15 in working position on the machine. A stud 2 is fixed centrally in the facing 1 and an arm 3 pivots thereon, having a corresponding facing. The two facings are kept in contact by means of an open spiral spring 4, which is in compression and is threaded on a boss cast on the arm 3, pressing with one end against the arm and with the other end against a washer 5 held up by a nut 6 threaded on the stud 2. The facing of the arm 10 is formed with two notches 7, of which only one is seen, the bottom of the notch being inclined as shown. On the corresponding face of the arm 3 are projections 8 (one only seen) engaging in the notches and the end of projection is inclined to correspond with the inclined bottom of each notch, the inclined faces kept together by the pressure of the spring being sufficient to maintain the arm in its vertical position shown on the right of Fig. 1. When the arm 3 is pulled forward round its pivot until it approaches the horizontal, the spring 4 is further compressed and the descent of the arm is arrested when it has reached its suitable position, by the projection 8 coming in contact with the lower end of the notch 7.

In order that the arm may not require to be unnecessarily long it is bent as shown at 11 Fig. 2 and the peg 12 secured thereto by the nut 9 is set at about 45 degrees to the horizontal so that when the reserve lap is placed thereon it will lie diagonally between the two laps 14 and 15 in working position on the machine.

When the operative requires to put the reserve lap to work on the machine she pulls down the arm 3 to its horizontal position when it is within easy reach, "readies" it and with little effort and no lifting easily withdraws it from its peg 12 and places it in its position on the lap rollers. After placing another spare lap on the peg 12 the arm is easily pushed up to its vertical position.

Claims:

1. In a combing machine creel, means for carrying a reserve lap and swinging the carrying means downwards to be within easy reach of the operative, such means comprising a pivoted arm, means for retaining such arm in the desired position, and a holder for the reserve lap, such holder being mounted on the pivoted arm in such a manner that its reserve lap in its reserve position lies diagonally between adjacent laps in their working position.

2. In a combing machine creel, means for carrying a reserve lap and swinging the carrying means downwards to be within easy reach of the operative, such means comprising an arm pivoted on the frame of the machine, notches on the frame which are inclined to correspond with projections on the

pivoted arm, a compression spring to ensure contact between the pivot arm and frame member by which it is borne and consequent engagement of a projection and notch when the arm has reached the desired position, and a holder for the reserve lap, such holder being mounted on the pivoted arm in such a manner that its reserve lap in its reserve position lies diagonally between adjacent laps in their working position.

In testimony whereof I have affixed my signature.

J. W. NASMITH.