

(No Model.)

E. ALLISON.

DOUBLING AND WINDING DEVICE FOR DOMESTIC USE.

No. 467,906.

Patented Feb. 2, 1892.

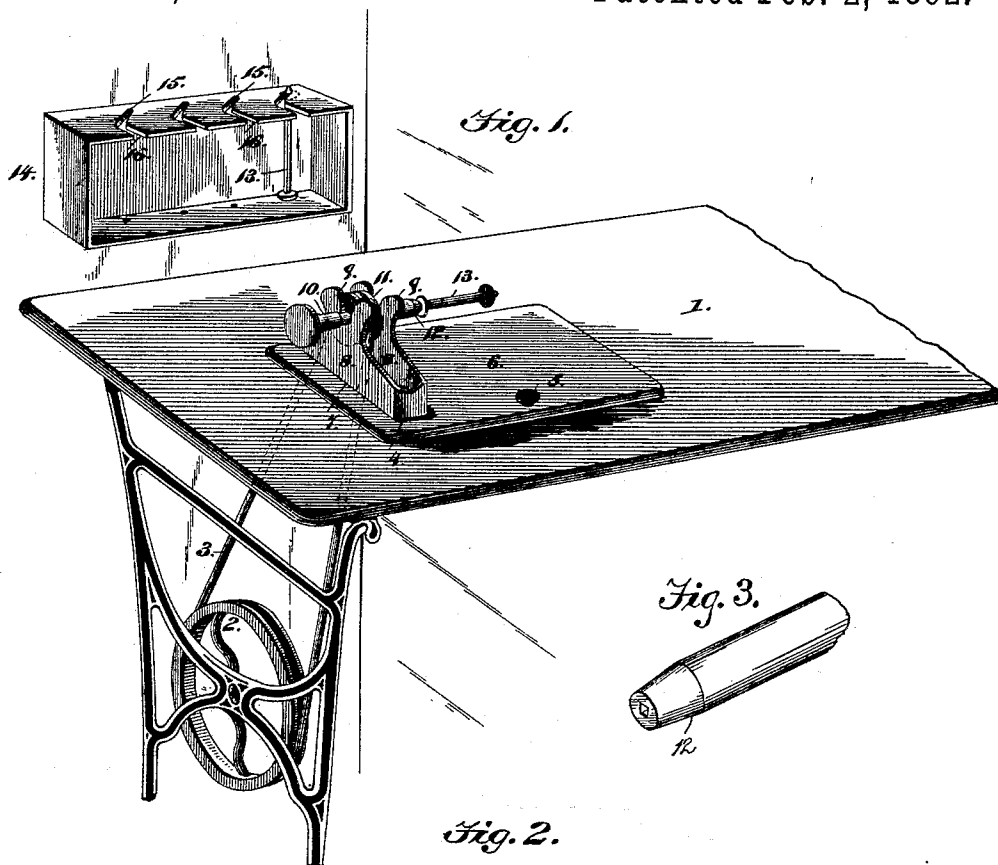
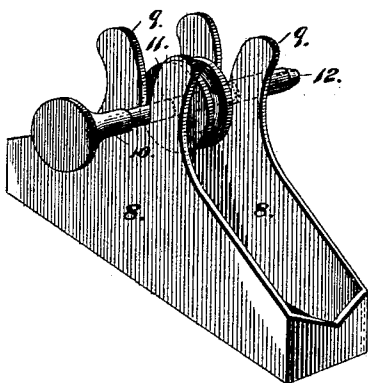


Fig. 3.



Fig. 2.



Witnesses:

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EMELINE ALLISON, OF OMRO, WISCONSIN.

DOUBLING AND WINDING DEVICE FOR DOMESTIC USE.

SPECIFICATION forming part of Letters Patent No. 467,906, dated February 2, 1892.

Application filed July 17, 1890. Serial No. 359,039. (No model.)

To all whom it may concern:

Be it known that I, EMELINE ALLISON, a citizen of the United States, residing at Omro, in the county of Winnebago and State of Wisconsin, have invented new and useful Improvements in Doubling and Winding Devices for Domestic Use, of which the following is a specification.

This invention relates to doubling and winding devices for domestic use; and the objects in view are to provide a doubling and winding device capable of being operated in connection with the table, fly-wheel, and treadle of an ordinary sewing-machine, in lieu of the usual head, and to be adapted for the doubling and winding of wool into yarn, said device being designed for operation by the usual driving-band of the sewing-machine.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a rear perspective of a sewing-machine table having a device constructed in accordance with my invention arranged thereon. Fig. 2 is an enlarged detail in perspective of the spindle and its support. Fig. 3 is a detail in perspective of the chuck end of the shaft.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the ordinary sewing-machine table, 2 the fly-wheel, and 3 the belt or band operated by the same. The table is provided with the usual opening at 4, and in the same is seated and secured by means of the binding-bolt 5 the base-plate 6 of the attachment. The base-plate 6 is provided at one side with transverse opening 7, at each side of which is located a vertical standard 8, provided at its upper end with open bearings 9.

Mounted for rotation in the bearings is a shaft 10, which, between the standards, carries a small grooved pulley 11, over which passes the endless driving belt or band 3. The inner end of the shaft terminates in a socket 12 for the reception of the end of the

spindle 13, which latter is removable from the socket, as is usual.

14 designates an oblong rack, the upper and lower portions of which are provided with spindle-receiving bearings 15, the upper bearings being open and accessible by means of curved slots 16.

In operation spindles are successively placed in the chuck or head of the shaft 10 and the wool wound thereupon until each spindle has been filled, the spindles filled agreeing in number with the threads composing the yarn to be doubled and wound together. After the spindles have been filled they are mounted in the rack, as shown in Fig. 1, which rack may be located upon the wall or under the machine or at any convenient point. It will be seen that the spindles are filled with single yarn, and the ends of the same are now tied by a thread to a spindle inserted in the attachment, which is rotated or run in an opposite direction; so that the series of yarn strands from the several spindles are combined and wound upon said spindle, after which it is ready to reel off into skeins.

Having thus described my invention, what I claim is—

1. The combination, with a sewing-machine table and the wheel and endless belt thereof, of the herein-described doubling and winding attachment, the same consisting of a base-plate mounted in the opening of the table in a removable manner and provided with a transverse opening, opposite vertical standards provided at their upper ends with open bearings, and a shaft removably mounted in the bearings and terminating at its inner end in a spindle-receiving chuck and between its bearings provided with a band-receiving pulley, substantially as specified.

2. The combination, with a sewing-machine table, its usual driving mechanism, and the herein-described removable doubling and winding attachment, the same consisting of a base-plate mounted in the opening of the table, opposite standards extending from the plate, and a transverse shaft mounted in the

standards and terminating at one end in a
chuck adapted to receive a spindle and pro-
vided with a small pulley, of a rack provided
with bearings arranged opposite each other
5 and adapted to receive a series of spindles,
said spindles being capable of rotation within
the rack and of withdrawal therefrom, sub-
stantially as specified.

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

EMELINE ALLISON.

Witnesses:

C. M. OATMAN,
P. M. WRIGHT.