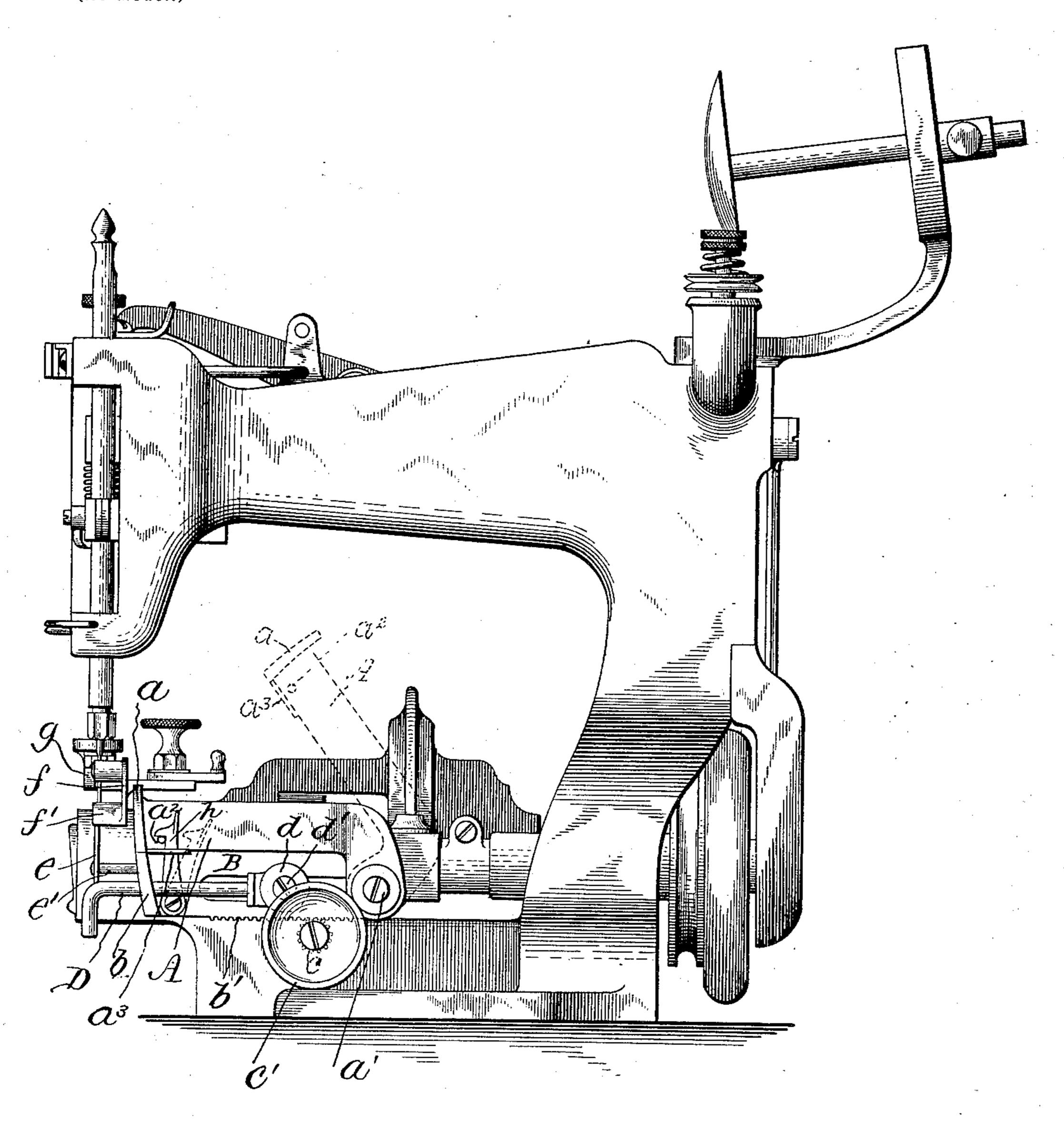
## E. L. WALES.

## STRAW BRAID GUIDE FOR SEWING MACHINES.

(Application filed May 10, 1900.)

(No Model.)



WITNESSES: 6. M. Sweeney Chester a. Baker

Olisha I Wales

By Albert

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

ELISHA L. WALES, OF MONSON, MASSACHUSETTS, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, OF NEW JERSEY.

## STRAW-BRAID GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 668,240, dated February 19, 1901.

Application filed May 10, 1900. Serial No. 16,209. (No model.)

To all whom it may concern:

Be it known that I, ELISHA L. WALES, a citizen of the United States, residing at Monson, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Straw-Braid Guides for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

therein to the accompanying drawing. My invention relates to the plait or braid guiding devices for straw-braid-sewing machines; and it consists in an improvement on the guiding devices shown and described in the United States Patent to C. H. Willcox, 15 No. 246,700, dated September 6, 1881. In the construction embraced by the said patent the right-hand edge-guide for the lower or entering braid is formed rigid or integral with a laterally-movable sliding plate or bracket provided 20 with a rack engaged by a pinion on an arbor provided with a milled head by which it can be conveniently turned to effect the lateral adjustment of the guide, the said guide being adjustable for the purpose of determining the 25 lap of the convoluted braid or plait, as also to accommodate braids or plaits of different widths, the adjustments for these purposes being, however, very small or slight. The guide in question is also made adjustable to 30 permit it to be removed entirely out of the way when certain sewing operations are being performed, as when it is necessary to form short cross-seams at the ends of the braids or in attaching short pieces of braid, as in cer-35 tain kinds of fancy hats, and a quick and considerable adjustment for this purpose is readily effected by the rack-and-pinion device referred to. After making this guide adjustment it is desirable when the plain sewing is 40 to be recommenced to return the guide to its original position, and this has required some little pains and care, and in some instances a special stop has been provided to secure this result accurately. In accordance with 45 my invention the edge-guide for the righthand side of the entering braid is carried by an arm or lever pivotally attached to an ad-

justable sliding plate or bracket, so that the

said arm may be readily turned upon its

guide entirely out of the way and may be

50 pivot when it is desired to remove the said

quickly turned down to its operative position when the plain sewing is to be recommenced, and thus the adjustment of the plate or bracket to which the guide-carrying arm is 55 pivoted is not disturbed in this moving of the guide out of the way, so that said guide assumes its original place when returned to working position without any particular care on the part of the attendant and without re- 60 quiring a special stop. Furthermore, the turning up of the guide on its pivoted arm leaves the work-plate of the machine entirely unobstructed, which is not the case when the guide is moved laterally by its sliding rack- 65 and-pinion adjustment, as there is not sufficient room on the machine to get the guide entirely out of the way by the sliding adjustment referred to.

The accompanying drawing illustrates, in 70 front side elevation, a Singer straw-braid-sewing machine with my invention applied thereto.

In the machine herein shown the righthand guide for the lower or entering braid 75 is preferably formed in two parts a and b, the guide or part a being rigid (and preferably integral) with an arm A, having a downturned rear end portion, which is pivotally attached by a screw a' to the rear end of a 80 sliding plate or bracket B, carrying the part or guide b, said plate or bracket being in the present instance provided with a rack b', engaged by a pinion c on a small arbor having a milled head c' for turning said arbor and 85 pinion. The plate or bracket B is frictionally held in place by a spring-washer d beneath the head of the screw d', which secures the hooked wire D in place, and which hooked wire serves to direct and steady the entering 90 braid. The guide e for the left-hand edge of the entering braid is carried by a rod e', frictionally supported by the plate or bracket B, and the work edge-guide f and separator f'are supported by the presser-foot g. The 95 pivoted arm A is provided with a pin or projection  $a^2$ , engaged by a hook or latch h, pivoted to the plate or bracket B, and which serves to hold the said arm and its guide in working position, the said hook or latch be- 100 ing moved to the position denoted by the dotted lines in the drawing when the said arm

and guide are to be turned up out of the way to the positions also shown by dotted lines. The arm A is preferably provided with a finger-piece  $a^3$ , by which it may be conveniently

5 moved up or down.

or bracket.

It will thus be understood that with the exception of the manner of mounting the guide a the work and braid guiding devices herein shown and described are or may be substan-10 tially the same in construction and operation as in the patent to Willcox hereinbefore referred to, so that further description is not necessary. I do not, however, wish to be understood as limiting my invention to the rack-15 and-pinion adjustment of the plate or bracket B herein shown and described, as with my invention this adjustment, although conven-- ient, is not necessary, it being obvious that the said plate or bracket might be adjustably 20 secured in place on the frame or work plate of the machine by one or more set-screws passing through a slot or slots in said plate

Having thus described my invention, I 25 claim and desire to secure by Letters Patent--

1. In a straw braid-sewing machine, the combination with an adjustable plate or bracket provided with a guide for the enter-30 ing braid, of an arm pivoted at its rear end to the rear end of said plate or bracket and provided at its forward end with a guide for

the entering braid coöperating with the guide on the said plate or bracket, and means for securing said arm in working position.

2. In a straw-braid-sewing machine, the combination with the adjustable plate or bracket B provided with the guide b, of the arm A pivoted to the rear end of the said plate or bracket B and provided at its for- 40 ward end with the guide a and also with a pin or projection, and the hook or latch h also pivoted to said plate or bracket B and engaging the said pin or projection to hold the said arm and the guide carried thereby in 45

working position.

3. In a straw-braid-sewing machine, the combination with the adjustable plate or bracket B provided with the guide b, of the arm A pivoted to the rear end of the said 50 plate or bracket B and provided at its forward end with the guide a, and also with a pin or projection and with a finger-piece  $a^3$ , and the hook or latch h also pivoted to said plate or bracket B and engaging the said pin 55 or projection to hold the said arm and the guide carried thereby in working position.

In testimony whereof I affix my signature

in the presence of two witnesses.

ELISHA L. WALES.

Witnesses:

EDWARD F. MORRIS, HENRY J. MILLER.