

No. 897,252.

PATENTED AUG. 25, 1908.

W. E. GRAVES.  
GRINDER ATTACHMENT FOR SEWING MACHINES.  
APPLICATION FILED MAY 2, 1907.

2 SHEETS—SHEET 1.

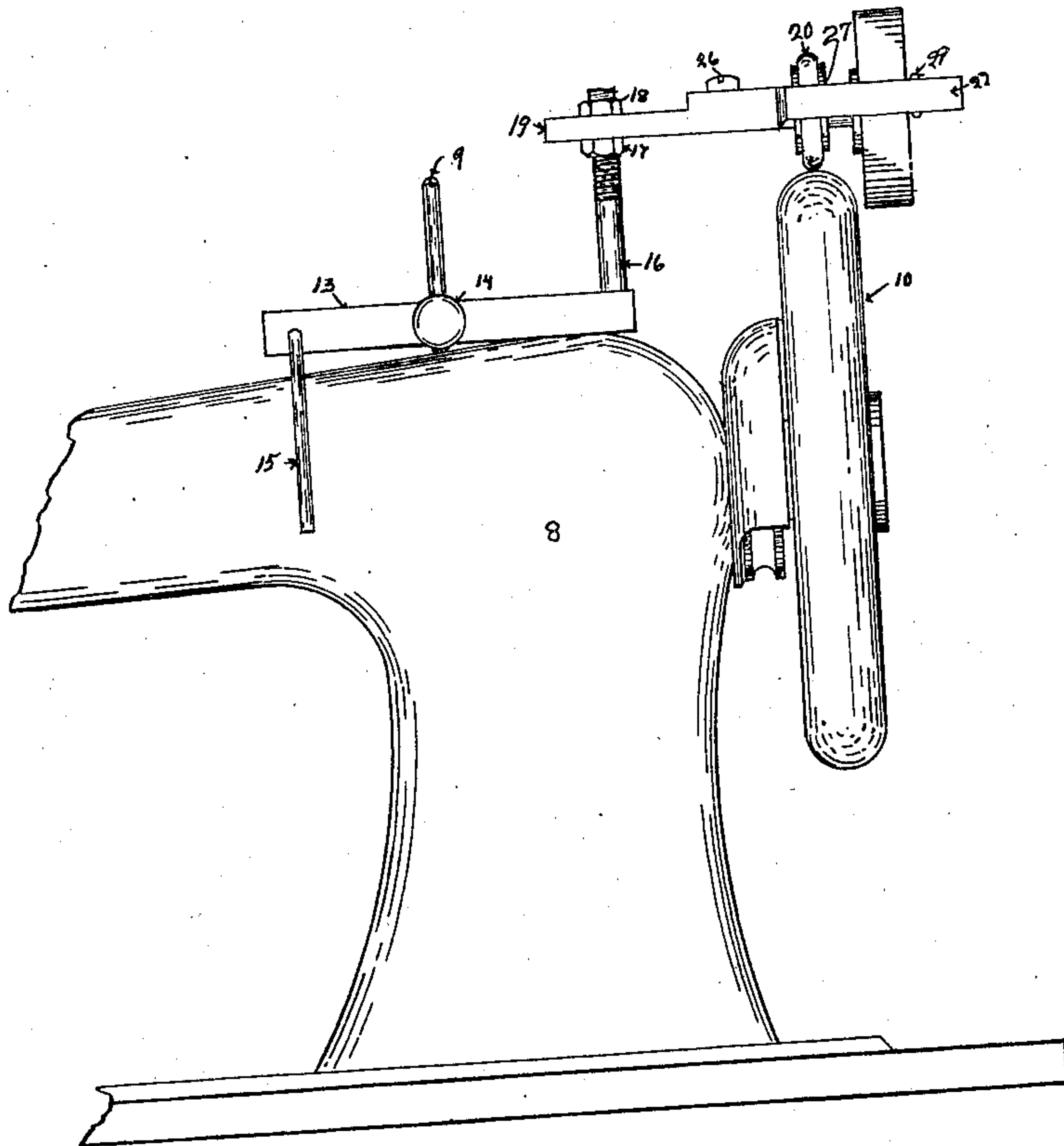


FIG. 1.

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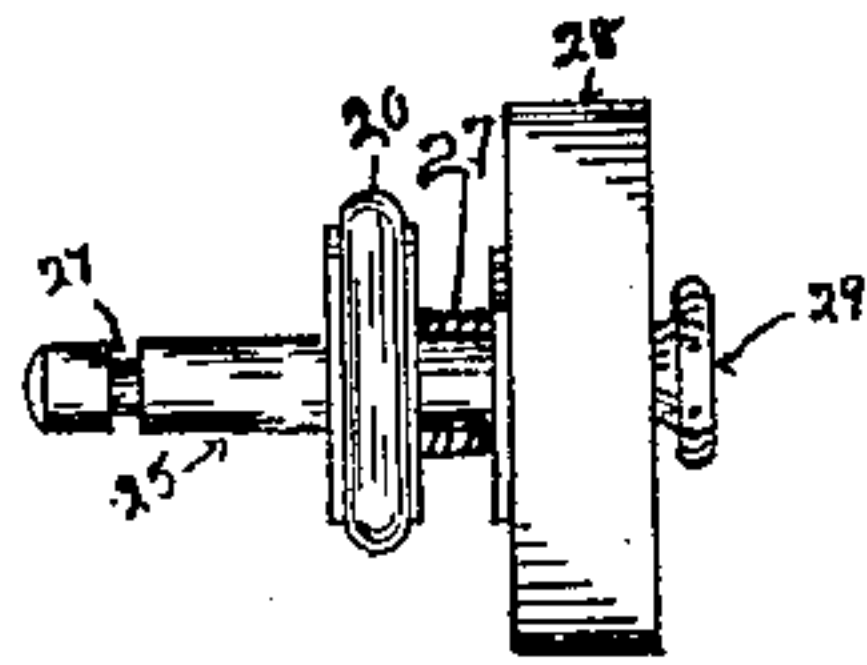


FIG. 2.

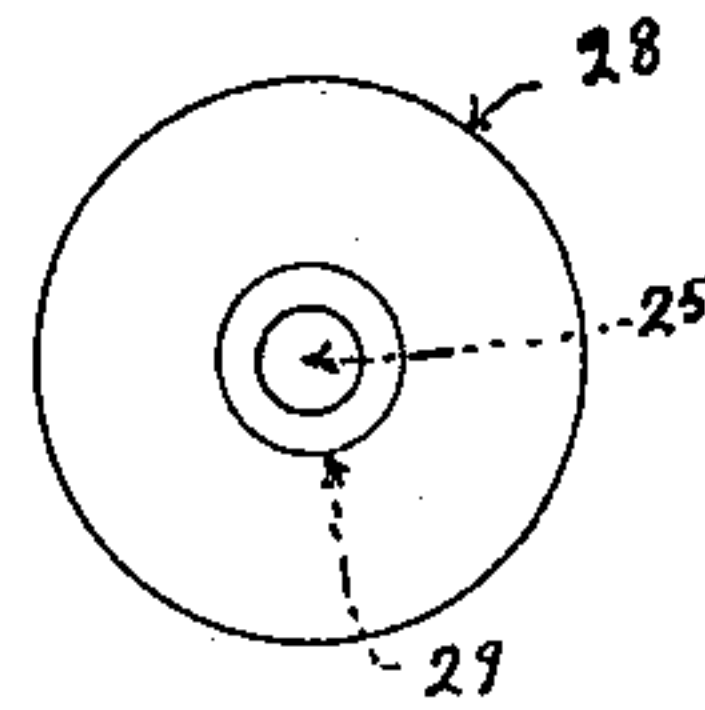


FIG. 5.

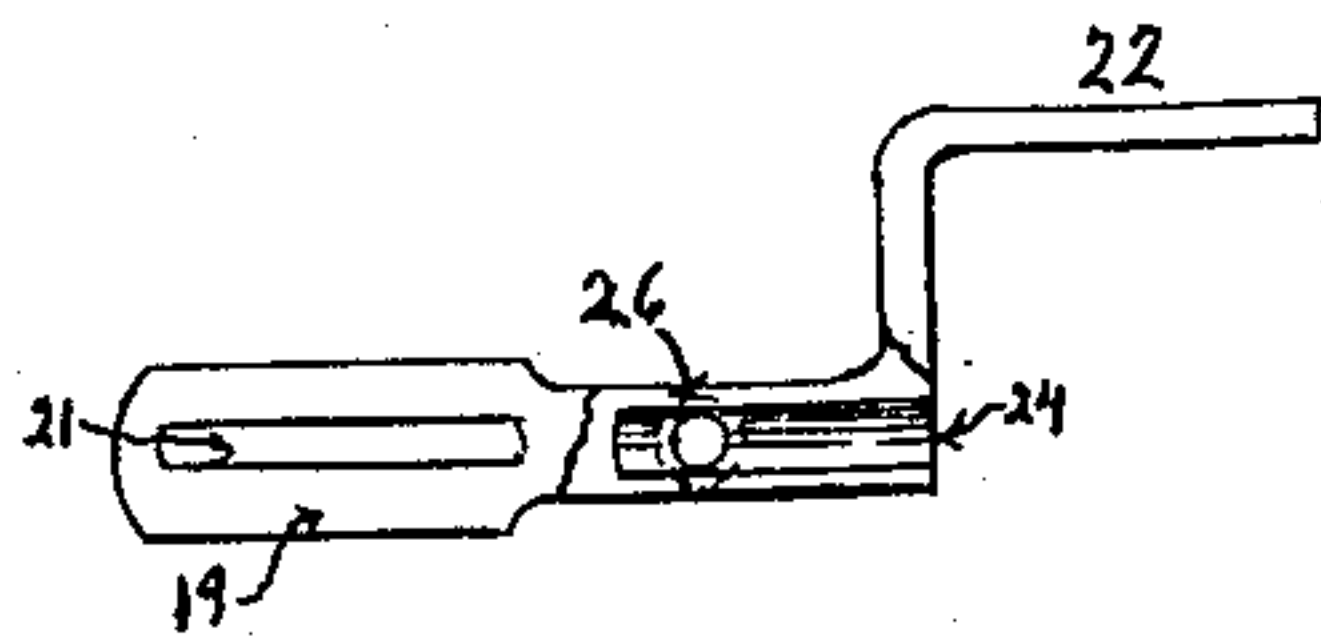


FIG. 3.

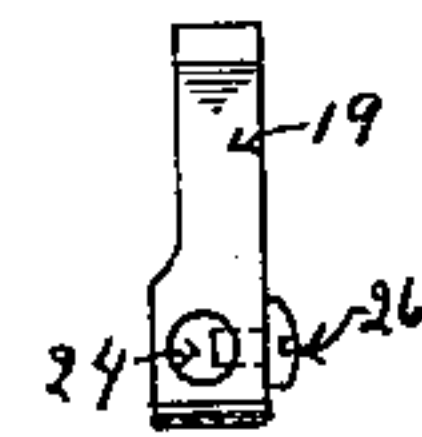


FIG. 6.

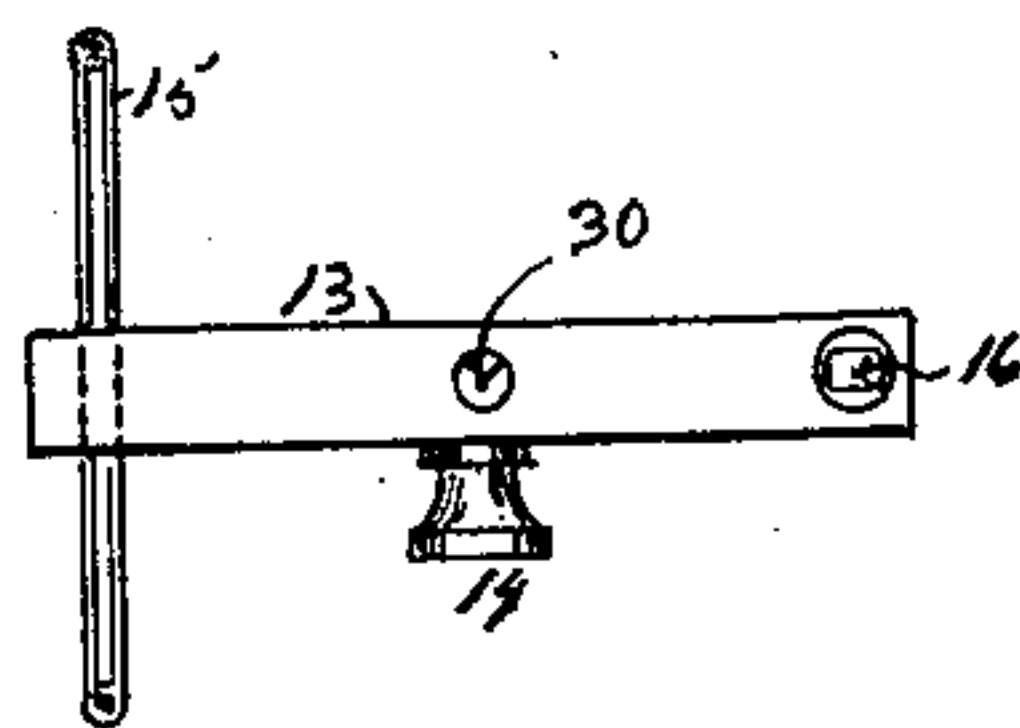


FIG. 4.

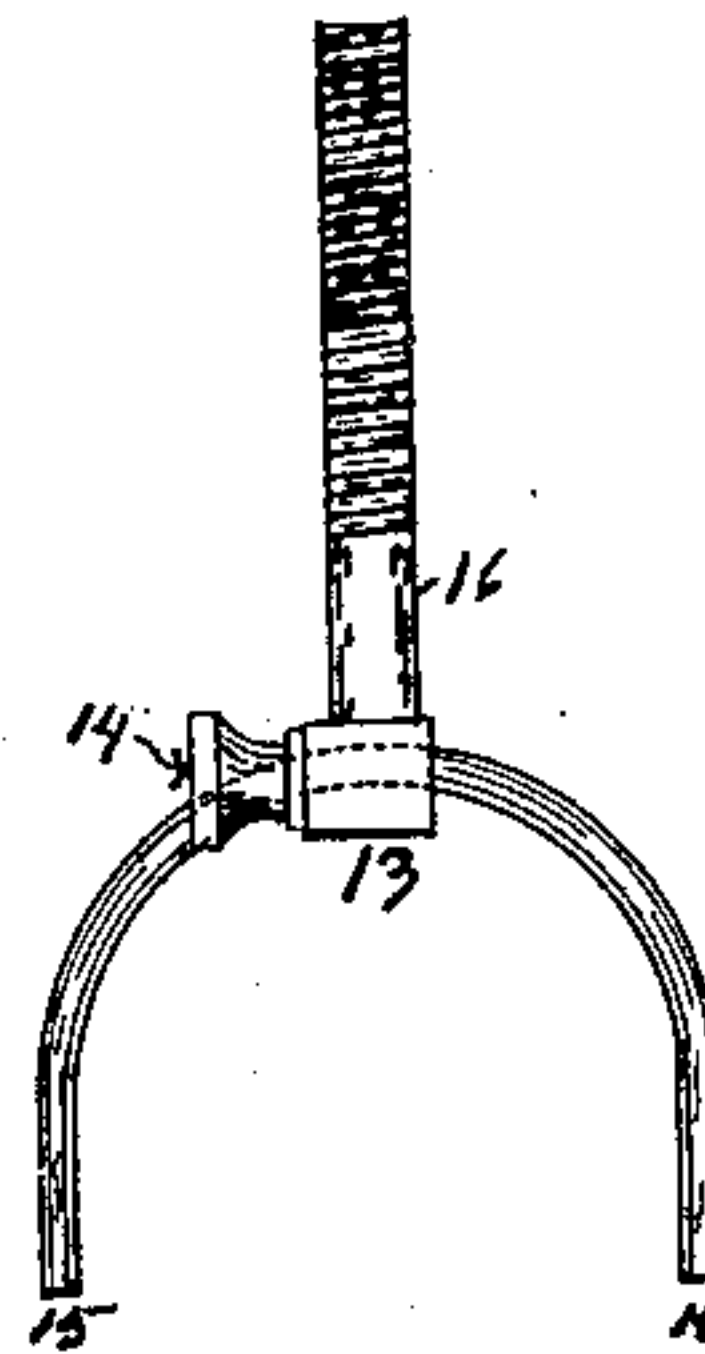


FIG. 7.

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# UNITED STATES PATENT OFFICE.

WILLIAM E. GRAVES, OF MARINETTE, WISCONSIN, ASSIGNOR OF ONE-HALF TO CHARLES DE MARSH, OF MARINETTE, WISCONSIN.

## GRINDER ATTACHMENT FOR SEWING-MACHINES.

No. 897,252.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed May 2, 1907. Serial No. 371,489.

*To all whom it may concern:*

Be it known that I, WILLIAM E. GRAVES, of Marinette, county of Marinette, and State of Wisconsin, having invented a certain new and useful Grinder Attachment for Sewing-Machines, do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

My invention relates to new and useful improvements in grinder attachments for sewing machines and my object is to provide a device which can readily be attached to or removed from the ordinary form of sewing machine and the following is a full, clear and exact description of the same.

In the accompanying drawings which are made a part of this application, I have shown the preferred form of my device.

In said drawings, Figure 1 is a side elevation of a portion of a sewing machine with my attachment secured in place thereon. Fig. 2 is a longitudinal view of the grinder shaft with a drive and a grinding wheel attached thereto, Fig. 3 is a detail view of the auxiliary frame adapted to carry the grinder shaft, Fig. 4 is a top plan view of the main frame, Fig. 5 is an end view of the grinder shaft with the drive and grinding wheels attached thereto, Fig. 6 is an end view of the auxiliary frame adapted to carry the grinder shaft, and, Fig. 7 is an end view of the main frame of my device.

Referring to the drawings by numerals of reference, similar reference numerals applying to similar parts throughout the several views, 8 is the body of the sewing machine having the ordinary form of spool shaft 9 secured thereto. My improved attachment consists of a main frame 13 which has an opening 30 therethrough which is adapted to receive the spool shaft 9 and be secured thereon by means of a thumb screw 14. Depending from one end of the main frame 13 are arms 15 which extend over the sides of the machine 8 and hold the frame 13 in alignment with said body 8. An upwardly extending standard 16 is secured to or formed integral with the opposite end of the frame 13, and has its upper end threaded to receive nuts 17 and 18 which are adapted to receive and lock therebetween an auxiliary frame 19 which is provided with a slot 21 in one end

through which the standard 16 passes, thus permitting longitudinal adjustment of said auxiliary frame 19.

The auxiliary frame 19 has a longitudinally extending bore 24 therein, in which is adapted to rotate a shaft 25 which has an annular groove therearound into which is adapted to extend a set screw 26 secured in the frame 19, said set screw preventing longitudinal movement of said shaft 25 in the bore 24 but leaving said shaft free to rotate. A drive pulley 20 is rigidly secured to shaft 25 and is provided with a rubber covering or ring adapted to bear against the hand wheel 10 of the sewing machine whereby the shaft 25 can be rapidly rotated. A grinding wheel 28 formed of abrasive material, is adapted to be secured to the end of the shaft 25 by means of a set screw 29 which takes into the end of said shaft, said grinding wheel being prevented from moving on said shaft by a spacing collar 27. An L-shaped arm 22 extends from the auxiliary frame 19 across the face of the grinder wheel 28 and provides a rest for tools, etc., to be sharpened.

It will thus be seen that I have provided an attachment which can be quickly adjusted to or removed from position on the ordinary form of sewing machine.

What I claim is:

1. An attachment for sewing machines comprising a main frame adapted to be secured to the spool shaft of a sewing machine, depending arms secured to one end of said main frame adapted to straddle the body of the sewing machine and hold said main frame in alinement with said body, a standard secured to the opposite end of said main frame, an auxiliary frame secured to said standard, means to adjust said auxiliary frame vertically on said standard, an L-shaped arm on said auxiliary frame providing a rest for tools to be sharpened, a shaft rotatably mounted in said auxiliary frame, a drive pulley secured to said shaft and a grinder wheel secured to the end of said shaft.

2. An attachment for sewing machines comprising a main frame having an opening therein adapted to receive the spool shaft of a sewing machine, depending arms secured to said frame at one end adapted to straddle the body of the machine and prevent movement of said frame, a threaded standard secured to the opposite end of said frame, binding nuts

on said standard, an auxiliary frame adapted  
to be clamped between said binding nuts, an  
L-shaped arm on said auxiliary frame provid-  
ing a rest for tools to be sharpened, a shaft  
5 rotatably secured in said auxiliary frame, a  
drive pulley rigidly secured to said shaft and  
adapted to bear against and receive motion  
from the hand wheel of the machine and a

wheel of abrasive material detachably secured  
to said shaft.

10

In testimony whereof I sign my name in  
the presence of two subscribing witnesses.

WM. E. GRAVES.

Witnesses:

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JOHN C. HILLS