Aug. 20, 1929. W. H. ROBBINS ET AL 1,725,305

STEEL WOOL MACHINE

Filed Feb. 3, 1927 2 Sheets-Sheet 1

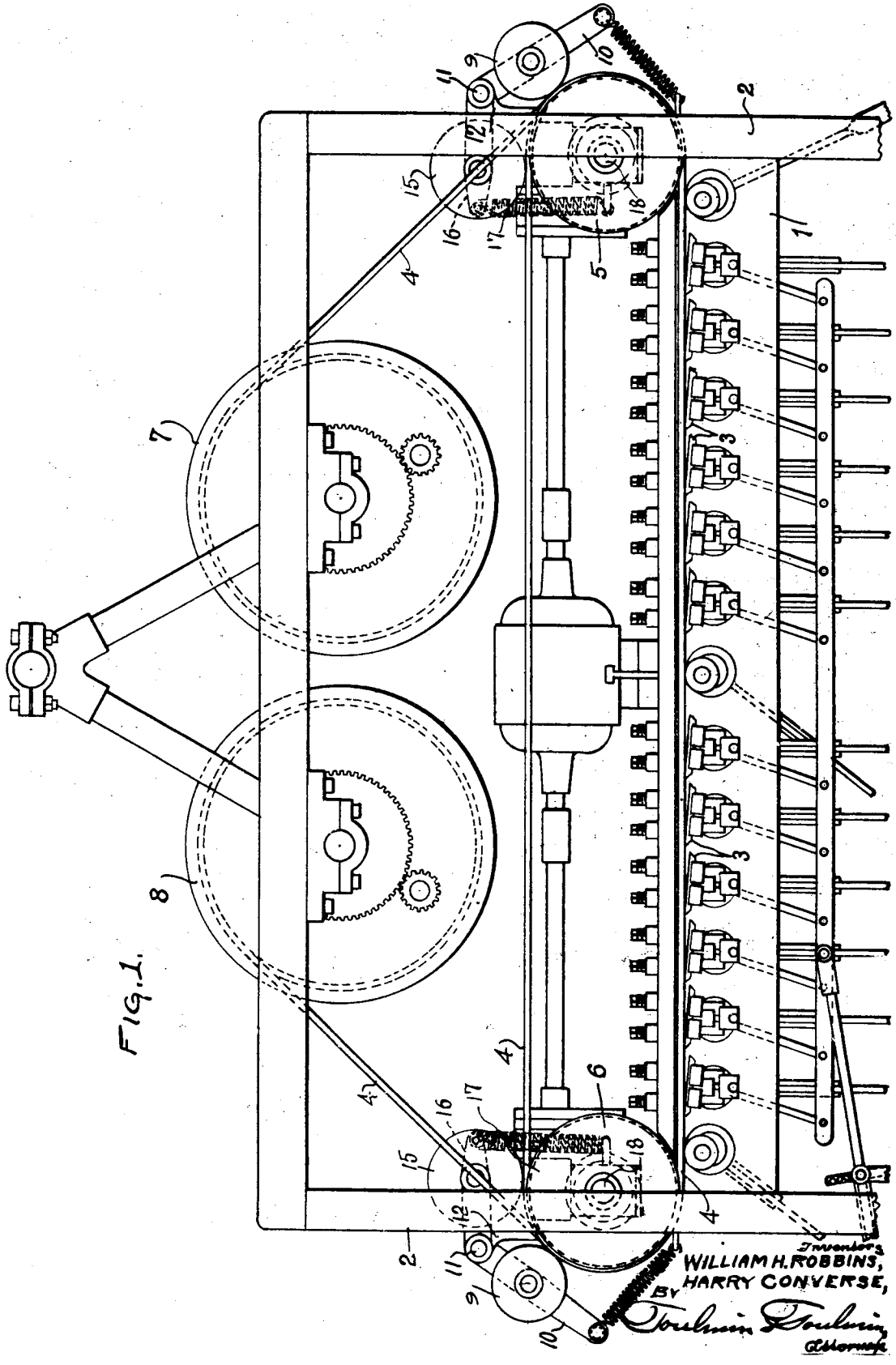


FIG. 1.

Aug. 20, 1929. W. H. ROBBINS ET AL 1,725,305

STEEL WOOL MACHINE

Filed Feb. 3, 1927 2 Sheets-Sheet 2

FIG. 2.

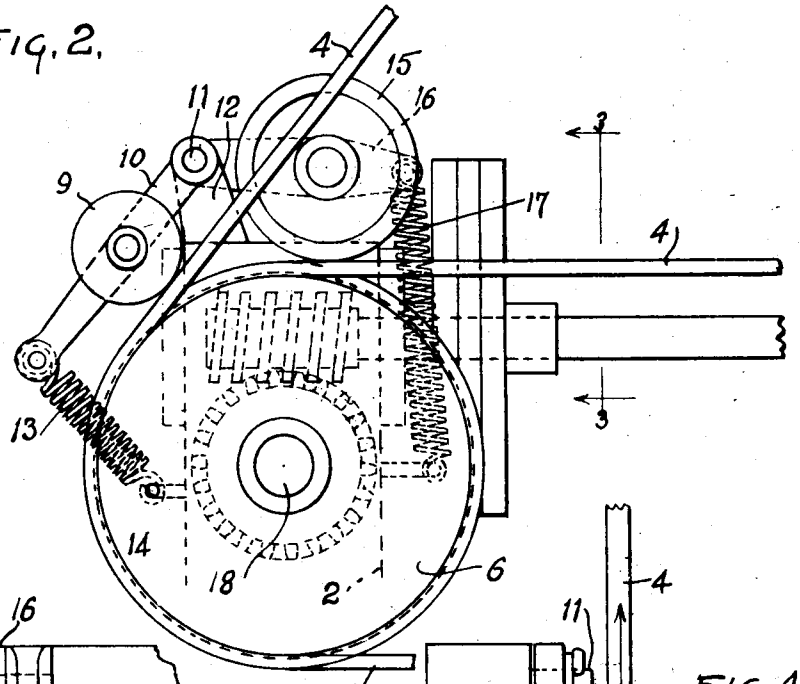


FIG. 3.

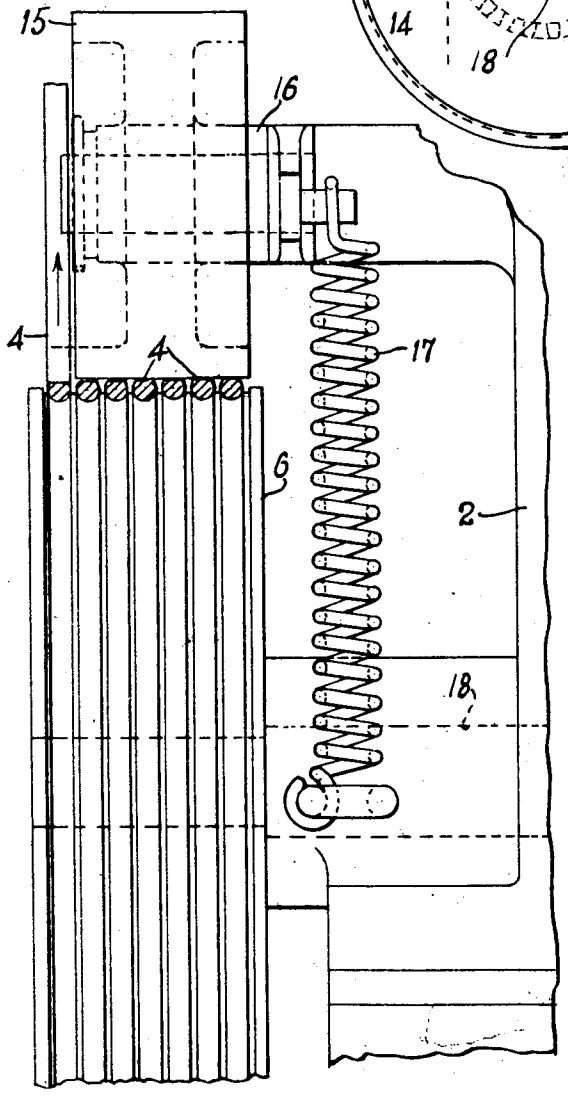
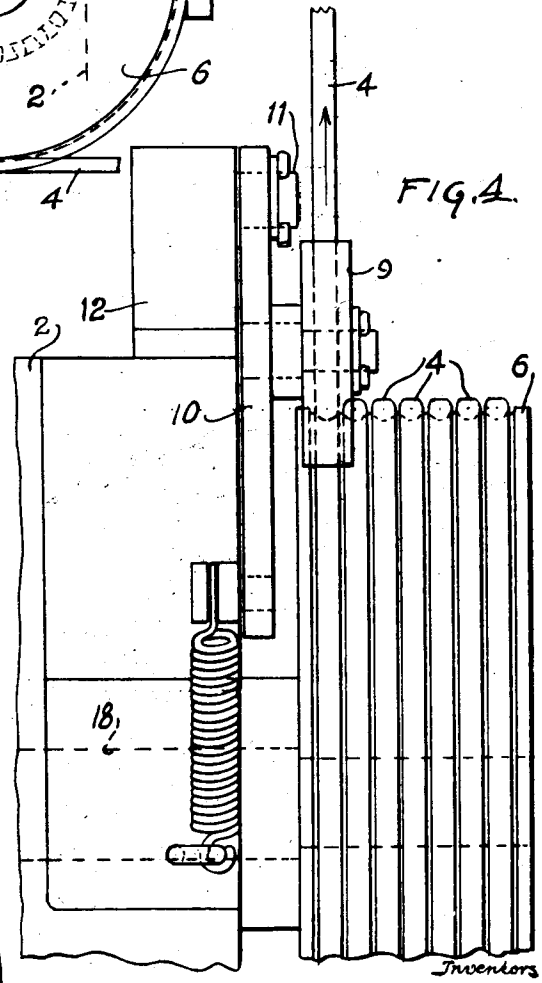


FIG. 4.



Inventors

WILLIAM H. ROBBINS,
HARRY CONVERSE

By Coulson & Coulson,

Attorneys

Patented Aug. 20, 1929. 1,725,305

UNITED STATES PATENT OFFICE.

WILLIAM H. ROBBINS, OF SPRINGFIELD, AND HARRY CONVERSE, OF LONDON, OHIO, ASSIGNORS TO THE WILLIAMS COMPANY, OF LONDON, OHIO, A CORPORATION OF OHIO.

STEEL-WOOL MACHINE.

Application filed February 3, 1927. Serial No. 165,545.

Our invention relates to steel wool machines.

It is the object of our invention to provide means for maintaining wire from which steel wool is made in proper engagement with the driving sheaves and in such form as to compensate for variations in thickness of the wire as it passes over the sheaves.

Referring to the drawings:

Figure 1 is a side elevation of the complete steel wool machine;

Figure 2 is a detail view of the wire retaining means in position;

Figure 3 is an end elevation thereof with the wires in section on the line 3—3 and looking in the direction of the arrow; and

Figure 4 is an end elevation looking towards the machine from the outside thereof.

Referring to the drawings in detail, 1 is a table carried by a frame 2. 3 indicates the cutting tools. The wire is a single continuous strand 4 looped over the sheaves 5 and 6 which are pivotally supported in the frame 2. The wire is unwound from one supply drum 7 and taken up by the other supply drum 8.

The details of this arrangement are fully set forth in the patent to William H. Robbins, No. 1,584,145, dated May 11, 1926.

The particular invention now involved deals with the use of spring-pressed rollers for maintaining the wire in position on the driving sheaves. Under some conditions of use, it is desirable to employ this improvement of the spring-pressed rollers.

9 indicates a roller adapted to engage with the wire 4 as it comes upon the drum, or as it departs, such roller being supported pivotally on an arm 10 pivoted at 11 on a bracket 12.

A larger and broader roller 15 is mounted on the lever 16 engaging the remainder of the wires or so closely adjacent to them as to prevent them from moving off of the sheave 5 or 6. This lever 16 is pivoted at 11 on the bracket 12 and is held in position by a spring 17 which is attached to the free end of the lever 16 and to the frame 2.

We find it desirable to mount the roller 9 adjacent the point of departure or arrival of the wire 4 on the sheave 5 or 6 and to mount the roller 15 adjacent the arrival and departure of the loops of wire on the sheave 5 or 6, so that the pressure may be applied between the axle 18 supporting the sheaves and the roller 15, so arranged that the wire is firmly supported beneath the roller 15 and the pressure by the roller is directly over the axle center or as near thereto as practicable.

It will be understood that we desire to comprehend within our invention such modifications as may be necessary to adapt it to varying conditions and uses.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent, is:

1. In a steel wool machine, driving sheaves, a wire looped over said sheaves, take-up and supply drums for said wire, and yielding means for maintaining said wire in engagement with said sheaves, said yielding means being adapted to engage the wire with respect to each sheave as it enters upon the sheave or departs therefrom, and an additional means adapted to engage the remaining loops of the wire on the sheaves adjacent each sheave, said means being adapted to be held in yielding engagement with said wire so looped.

2. In a steel wool machine having power driven wire, driving and supporting sheaves, and take-up means for the free ends of said wire, a relatively narrow roller yieldingly engaging the departing and arriving portions of the wire adjacent each of said sheaves, and a broad roller yieldingly pressed in engagement with the surfaces of the loops of said wire on said sheaves over each sheave to maintain said wire loops in engagement with said sheaves.

In testimony whereof, we affix our signatures.

WILLIAM H. ROBBINS.
HARRY CONVERSE.