To all whom it may concern:

Be it known that I, STONEWALL J. CAROLAND, a citizen of the United States, residing at Woodlawn, in the county of Montgomery and State of Tennessee, have invented a new and useful Hoop-Coiling Machine, of which the following is a specification.

This invention relates to hoop coiling machines, it being the object of the invention to improve the structure and utility of the device on which a patent was granted me, under date of October 13, 1908, and which bears Patent Number 741,100.

An object of the invention is to provide means forming a part of the machine for securing the hoop to the machine in a manner to prevent the same from working off the coiling device.

A further object of the invention is the provision of novel means for guiding the hoop to the coiling device to insure the same entering directly under the coiling strip.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 illustrates a side elevational view of a hoop coiling machine constructed in accordance with the present invention.

Fig. 2 is a plan view of the same.

Referring to the drawing in detail, the reference character 5 designates the base of the machine, to which are secured the supporting legs 6, which in turn support the table 7.

Supported by the base 5 and table 7, is an operating shaft 8 which has its upper extremity extending an appreciable distance above the table 7, where the same supports the pulley 9, which accommodates a belt from any suitable power device not shown.

Secured to the shaft 8 and operating at a point adjacent to the table 7, is a coiling drum 10 around which the hoops pass during the coiling operation, a hoop being indicated in the drawing by the reference character 11, for the sake of illustration. Associated with the drum 10, is a strip 12 formed preferably of flexible metal, the strip having one of its ends anchored to the table 7 as at 13, the intermediate portion thereof being extended around the drum 10, while the opposite end of the strip has connection with the coiled spring 14 as through the medium of the link 15.

This coiled spring 14 has one end thereof secured to the extension 16 formed at one end of one of the legs 6, there being provided an eye bolt 17 passing through the extension for connecting the spring to the frame. A nut 18 operates on one end of the threaded eye bolt to provide for an adjustment of the coiled spring 14 to permit the tension on the strip 12 to be changed or regulated to meet various requirements.

Clamping fingers 19 cooperate with the coiling drum and overlie a portion thereof to restrict movement of the hoop vertically when hoops are being applied to the coiling drum, thereby eliminating any possibility of the hoops becoming displaced from the drum 10.

To further insure against vertical movement of the hoops, a pivoted lever 20 is provided, which pivoted lever has connection with the table 7 as at 21, the opposite end of the lever being disposed at a point under the hook member 23, which also has pivotal connection with the table to move upwardly into engagement with the lever to lock the lever in its securing position.

The lever 20 is of a length to overlie portions of the strip 12 and the hoop under operation, and is designed to contact with the forward portion of the hoop when the same is being passed into or between the strip 12 and drum 10.

Secured to the upper end of the shaft 8, is a sweep 23, which preferably extends at an angle, and carries the whiffletree 24 on one end thereof, by means of which the shaft 8 is rotated by any suitable draft animal.

In the operation of the device, a hoop is secured to the drum 10 as by means of the pin 25, whereupon the shaft 8 is rotated to draw the hook between the drum 10 and strip 12.

When the hoop passes into the machine, a predetermined distance, the forward end of a second hoop is introduced between the rear end of the first hoop and the periphery of the drum, and the continued motion of the
drum causes the second hoop to be wound on the drum outside of the first mentioned hoop.

Having thus described the invention, what is claimed as new is:

In a hoop-coiling machine, a frame, an operating shaft mounted on the frame, a drum secured to the operating shaft to move therewith, a strip of flexible metal having one end anchored to the frame at a point adjacent to the drum, resilient means for connecting the opposite end of the flexible member to the frame, clamping fingers carried by the frame and overlying the upper edge of the drum, a pivoted lever adapted to move across one corner of the drum and contact with the flexible member at a point adjacent to the periphery thereof, and means for operating the shaft.

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

STOWE WALL JACOB CAROLAND.

Witnesses:

CELLUS BOYD,

ANNA ALLEN.