

(No Model.)

L. GODDU.
SOLE FASTENING WIRE.

No. 370,136.

Patented Sept. 20, 1887.

Fig: 1.

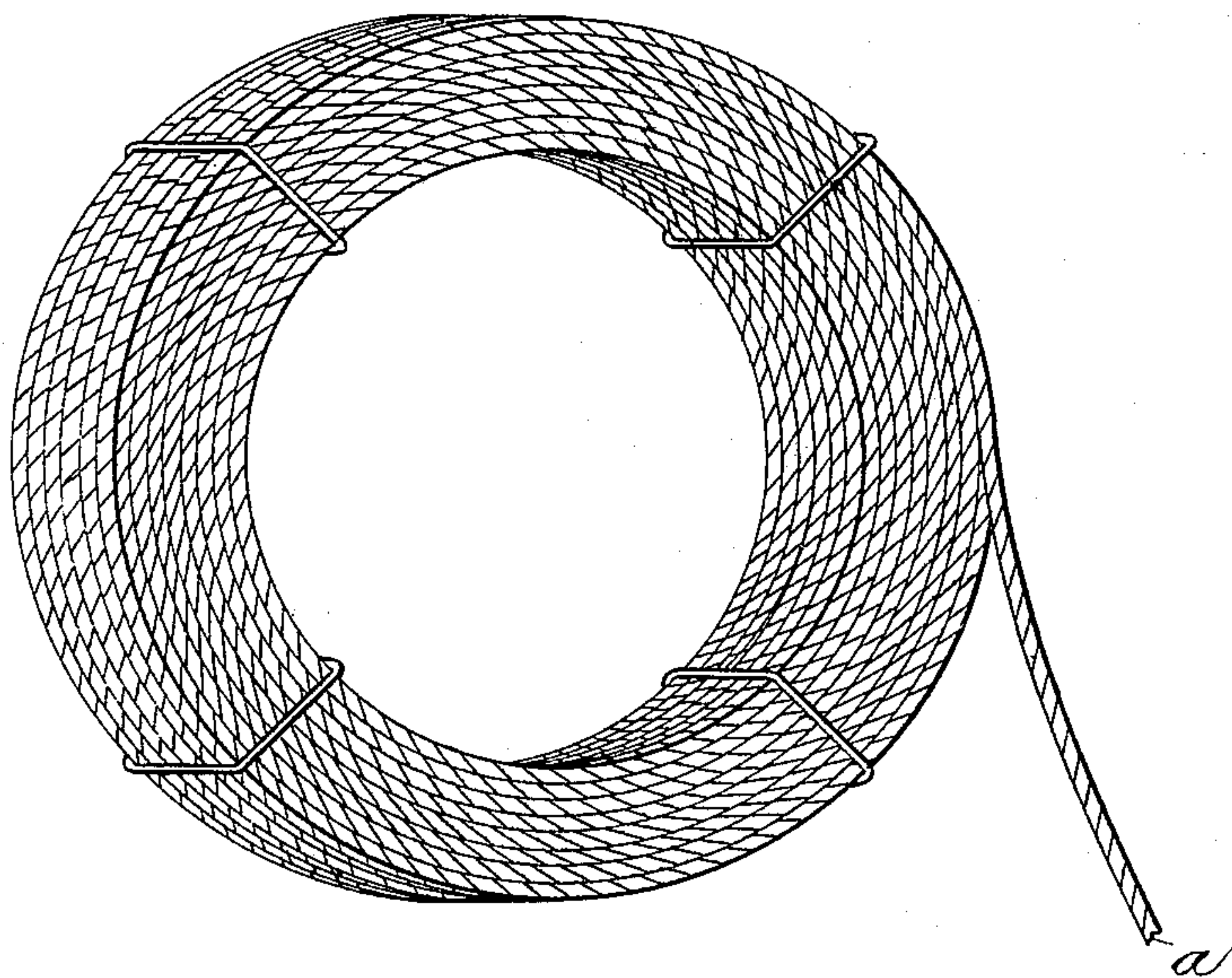


Fig: 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, ASSIGNOR TO JAMES W. BROOKS, PRINCIPAL TRUSTEE, OF CAMBRIDGE, AND FRANK F. STANLEY, ASSOCIATE TRUSTEE, OF BOSTON, MASSACHUSETTS.

SOLE-FASTENING WIRE.

SPECIFICATION forming part of Letters Patent No. 370,136, dated September 20, 1887.

Application filed May 21, 1887. Serial No. 238,958. (No model.)

To all whom it may concern:

Be it known that I, LOUIS GODDU, of Winchester, county of Middlesex, and State of Massachusetts, have invented an Improvement in Sole-Fastening Wire, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

In the manufacture of shoes the soles are commonly secured to the upper by means of fastenings cut in measured lengths from a threaded wire taken from a coil of wire. This wire as now used is provided with a single thread of quite short pitch, which is made to enter the stock by rotating the wire, and is then cut off close to the stock. The finer the thread, the greater the number of rotations and the longer the time required to screw the wire through the stock, and so, also, the less the pitch of the thread, the slower it is cut in the machine producing the wire. The wire to be useful should be well covered by threads.

In my experiments to cheapen the construction of boots and shoes I have discovered that a sole-fastening wire may be provided with two or more threads of considerable pitch at a very much less cost in time than when the wire has but a single thread, as now in use, and as described in United States Patent No. 161,842, and it follows that the end of a sole-fastening wire provided with a multiple thread may be inserted into the sole or stock at a much greater speed, thus cheapening the cost of making the shoe.

Figure 1 shows a coil of sole-fastening wire embodying my invention, it being provided with a double thread; and Fig. 2 is an enlarged detail of one end of the fastening-wire.

The sole-fastening wire *a*, instead of being provided with a single thread, as in United States Patent No. 161,842, is provided, as shown, with two threads running spirally about the wire, but parallel each to the other, these two independent threads, as 2 and 3, being of quite steep pitch, thus enabling the end of the sole-fastening wire to be entered more rapidly into the stock.

The wire is put up into coil form, as shown, to be easily applied to a machine for uniting soles to uppers.

By the employment of a sole-fastening wire, as described, it having more than one thread, great economy is effected by the saving of time in the manufacture of the wire, and also a great saving in the time for inserting the wire into the stock or sole.

In the insertion into stock of sole-fastening wire having a single thread the cutting knives are set in the same plane on opposite sides or parts of the wire, and as the wire has but a single thread it necessarily follows that while one knife is cutting between threads the other knife on the opposite side or part of the wire is acting on the edge of the thread and bends or turns the said edge over, so that it partially fills up the space between the threads on that side or part of the wire.

A sole-fastening wire having a single thread, and cut as described, offers considerable resistance while entering into the stock, on account of the bending or turning of the edge of the thread, as described, and so, also, the holding power of the fastening cut from it, when embedded in the stock, is diminished to a considerable degree, owing to the injury of the thread at the point where it is cut from the wire, whereas a double or multiple thread affords greater facility for both knives to cut in the grooves, which always come substantially diametrically opposite on the wire, thus obviating injury to the end or point next to be inserted into the material.

I claim—

As an improved article of manufacture, a sole-fastening wire having independent or separate threads, the grooves between the threads being substantially diametrically opposite, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS GODDU.

Witnesses:

G. W. GREGORY,
B. DEWAR.