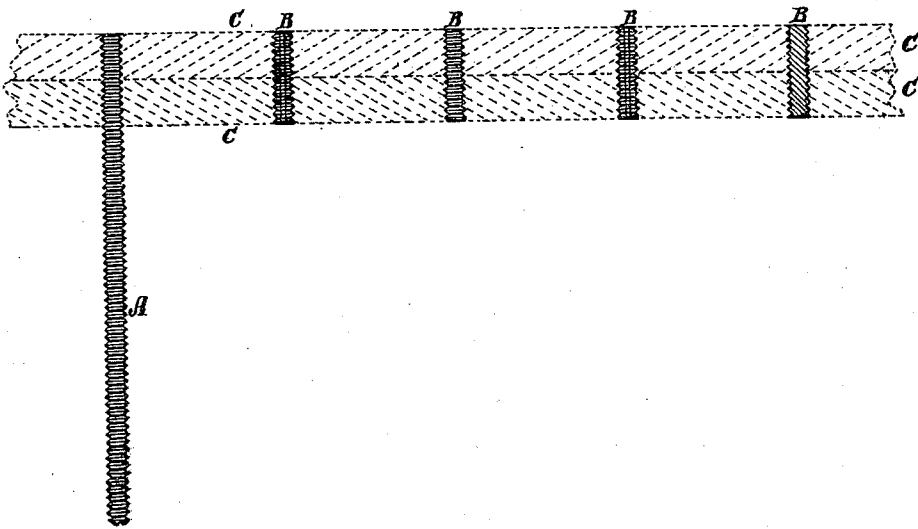


G. V. SHEFFIELD.

SCREW-THREADED RAW-HIDE SHOE-PEGS.

No. 178,386.

Patented June 6, 1876.



WITNESSES:

A. Benneken & Co.
A. F. Terry

INVENTOR:

George V. Sheffield
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UNITED STATES PATENT OFFICE.

GEORGE V. SHEFFIELD, OF NEW YORK, N. Y., ASSIGNOR TO SHEFFIELD
SCREW DRIVING MACHINE COMPANY, OF SAME PLACE.

IMPROVEMENT IN SCREW-THREADED RAWHIDE SHOE-PEGS.

Specification forming part of Letters Patent No. **178,386**, dated June 6, 1876; application filed
November 21, 1874.

To all whom it may concern:

Be it known that I, GEORGE V. SHEFFIELD, of the city, county, and State of New York, have invented a new and Improved Fastening for Boots, Shoes, &c., of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

The drawing represents my improved fastening in side elevation, as used for fastening two pieces of leather or rubber together, the said pieces being shown in section in dotted lines.

A represents a long screw-threaded string of petrified hide, which is screwed in a screw-tapped hole in the pieces C to be fastened, and then cut off flush with or slightly above the surface, thus making the fastenings or screw-cut peg B.

In carrying out my invention I take the skins or hides as they come from the animals and spread them on boards placed over a bed of common salt in a retort, and subject them to the action of the salt heated to about 90° for a sufficient length of time to petrify and harden them, so as to make practicable screws of strings cut from them, the width being about the same as the thickness of the skin or hide, so as to make them square, or thereabout.

For heavy work—such as belting—thick heavy hides or skins will be used, and for lighter work thinner skins will be used.

An essential advantage of this fastening is, that it may terminate flush with the surface, and thus will not project, and it will wear even with the surface. It will hold better than any other fastening, and is peculiarly fitted for the purpose, on account of being of the same nature as the leather fastened by it. The leather fastened by it will not shrink away from the threads, as it does from the sides of parts or threads which are necessarily put in the stock when wet, whereas this can be put in dry stock.

The screw-threads may be cut by any approved means; but the contrivance which I have used consists, essentially, of a stationary hollow tubular stock, holding the string, with a revolving nut at one end, to receive the threaded portion and draw it out of the stock between, say, four rotating saws, in different planes, and also revolving around the string as it emerges from the stock, so as to reduce it to round form, and at the same time make a spiral groove, all the saws working in the same groove.

Another plan may consist of one or more circular revolving disks of steel, with spiral threads on the face pressing against the string, and also revolving around it, to impress the grooves in the string, and at the same time press it into round form.

The corners of the string might be dressed off round, or partly so, if thought best; but it is not believed that it will be necessary.

These screws may also be made of ligaments and some other parts of animals; but the skins will, probably, be the best.

In practice a machine will be used to insert the fastening, which will be contrived to bore the holes, cut the screw-threads, screw in the fastening, cut it off, and feed the work along, a universal chuck being used to hold and operate the screw, and contrived so that it will open and run back along the screw the length of each fastening each time the inserted fastening is cut off; but they may be inserted with a suitable chuck by hand.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As a new article of manufacture, a screw-threaded shoe fastening or peg made of animal hide, substantially as shown, and for the purpose described.

GEORGE V. SHEFFIELD.

Witnesses:

T. B. MOSHER,
C. SEDGWICK.