

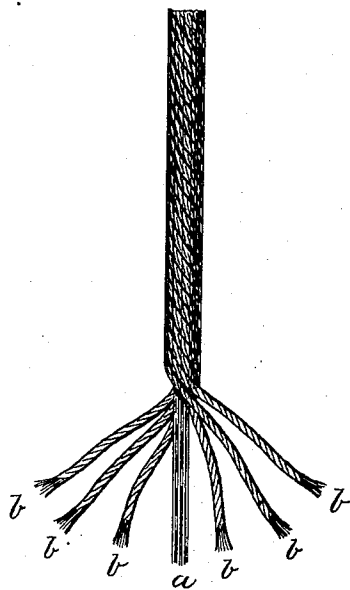
(Specimen.)

E. H. HASKELL.

TWINE.

No. 367,295.

Patented July 26, 1887.



Witnesses.
Charles H. Figg.
Henry Chadbourne.

Inventor.
Edward H. Haskell.
by Alban Andrieu
his atty.

UNITED STATES PATENT OFFICE.

EDWARD H. HASKELL, OF GLOUCESTER, MASSACHUSETTS.

TWINE.

SPECIFICATION forming part of Letters Patent No. 367,295, dated July 26, 1887.

Application filed March 16, 1887. Serial No. 231,082. (Specimens.)

To all whom it may concern:

Be it known that I, EDWARD H. HASKELL, a citizen of the United States, and a resident of Gloucester, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Twine, of which the following, taken in connection with the accompanying drawing, is a specification.

My invention relates to improvements in twine, and it is carried out as follows, reference being had to the accompanying drawing, which represents a side view of the twine, its lower end being shown untwisted to represent the position of the central core. The twine is made in all sizes and plies, and it consists of a central strand, *a*, of Manila or Sisal yarn, around which are wound spirally one or more plies of jute strands *b b b*, as shown in the drawing.

The object sought to be attained is to secure additional strength to the twine and at the same time to preserve the appearance and softness of ordinary jute twine.

The central strand of Manila or Sisal yarn imparts the desired strength, while the sur-

rounding strands of jute give pliability and softness to the improved twine.

I am aware that cotton and hemp have been combined together, as well as silk and worsted with hemp, in the manufacture of ropes, and I wish to state that I do not claim such combinations as my invention; but

What I wish to secure by Letters Patent and claim is—

As a new article of manufacture, a twine composed of a central strand of Manila or Sisal yarn, *a*, surrounded by one or more plies of jute strands, *b b b*, for the purpose of increasing the strength and retaining the softness and pliability of the article, as hereinabove set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 14th day of March, A. D. 1887.

EDWARD H. HASKELL.

Witnesses:

ALBAN ANDRÉN,
HENRY CHADBOURNE.