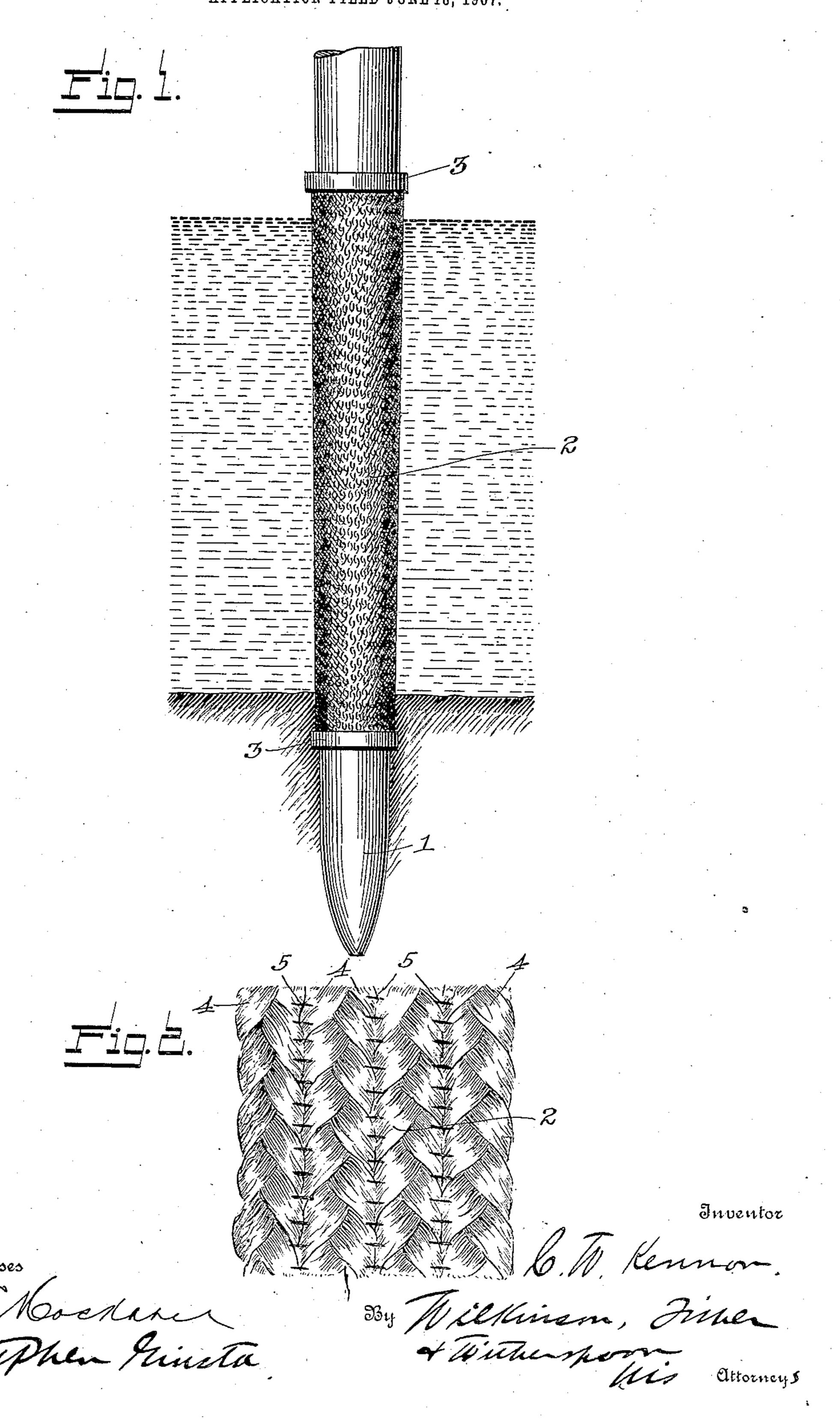
## C. W. KENNON. PROTECTING COVERING FOR PILES. APPLICATION FILED JUNE 18, 1907.



## UNITED STATES PATENT OFFICE.

CHARLES W. KENNON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO EDWARD K. H. D'AETH, OF NEW YORK, N. Y.

## PROTECTING-COVERING FOR PILES.

No. 879,649.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed June 18, 1907. Serial No. 379,610.

To all whom it may concern:

Be it known that I, Charles W. Kennon, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Protecting-Coverings for Piles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in coverings for protecting the submerged portions of piles or other submarine construc-15 tions from the attacks of aqueous animal life, such for instance as the teredo, and the invention is primarily designed as an improvement over the prior patent; No. 587,077, dated July 27, 1897, issued to C. W. Kennon. In that patent the piles were protected by means of boards cut from the palmetto tree, which boards were specifically prepared and were secured to the piles in separate strips. This arrangement, how-25 ever, has certain disadvantages, inasmuch as it is more or less difficult to properly set the boards in place so that the pile is absolutely protected from the attacks of the aqueous life. By the present invention, however, it 30 is aimed to prepare the fiber of the palmetto tree in such fashion as to make a woven covering which may readily be wrapped around the pile and secured thereto in any suitable fashion, preventing the necessity of 35 the joinder of several sections or boards, as described in the patent aforesaid.

In broadly carrying out the invention, the aim is to disintegrate the fiber of the palmetto tree and to weave or to intermesh or intertwine the individual strands of fiber secured therefrom into an integral covering or wrapper of fibrous palmetto material, it having been found that the properties of the palmetto tree are very high as a repellant to aqueous animal life, and particularly the teredo.

While I do not restrict myself to the exact details illustrated and described, for the purpose of disclosure, reference is had to the accompanying drawings, showing a practical embodiment of the invention, in which:—

Figure 1 designates a pile driven in position and showing there around a covering formed of interwoven fibers of the palmetto tree, and Fig. 2 is a view showing a portion of

said covering roughly illustrating a method of securing the individual strands of fiber together.

1 designates the pile and 2 the fibrous palmetto covering which may be secured in 60 position thereon in any suitable way. While the same may be applied by winding it around the pile spirally, for the purpose of illustration, in the drawings it is simply shown as being wrapped around in a vertical 65 direction, the tops and bottoms being protected, if desired, by suitable bands 3. It will be understood, however, that I do not limit myself to any particular method of wrapping the covering around the pile and 70 securing the same thereto. Also it may be observed that if desirable, the covering may be treated with any suitable compound before being placed around the pile, said compound being composed of properties that are 75 in themselves a protection against the teredo: this being done for still further protecting the pile and its covering. I have found in actual practice, that a good compound for this purpose is a mixture of as- 80 phaltum, resin, pitch, creosote and oxid of iron.

In preparing the covering as previously stated, the fiber of the palmetto tree is separated into individual strands, which strands may be spun and interwoven in any suitable manner to form the flexible covering. In actual operation, this would probably be done by a machine, but for the purpose of illustration in the drawings in Fig. 2, there is shown a plurality of plaits 4, stitched together edgewise, as at 5, which plaits are formed by a plurality of bunches of disintegrated fibers twisted or plaited together.

Having thus described the invention, what 95 I claim is;—

1. The combination with a pile, log or other timber, of a fibrous wrapping made from the palmetto applied directly to that portion of its surface which is to be sub- 100 merged, said wrapping consisting of the individual strands of palmetto fiber woven into a material of desired thickness and width, substantially as described.

2. The combination with a pile, log or 105 other timber, of a fibrous wrapping made from the palmetto applied directly to that portion of its surface which is to be submerged, said wrapping consisting of the individual strands of palmetto fiber woven into 110

a material of desired thickness and width, and treated with a teredo protecting com-

pound, substantially as described.

3. The process herein described of protecting piles, logs etc., and rendering them teredo proof, the same consisting in first disintegrating the fiber of the palmetto into individual strands, then weaving the said fiber into a burlap of suitable width and thickness, then applying a suitable compound to the woven fabric, and finally securing the woven fabric to the exterior of the pile to be protected by wrapping the same around it in any suitable manner either spirally or otherwise and finally securing the fibrous wrapping directly upon the surface of the pile, etc. by any suitable fastening, substantially as described.

4. The process herein described of protecting piles, logs etc., and rendering them teredo proof, the same consisting in first disintegrating the fiber of the palmetto into individual strands, then weaving the said fiber into a burlap of suitable width and

thickness, then applying a suitable com- 25 pound to the woven fabric, and finally securing the woven fabric to the exterior of the pile to be protected, substantially as described.

5. The process herein described of pro-30 tecting piles, logs etc., and rendering them teredo proof, the same consisting in first disintegrating the fiber of the palmetto into individual strands, then weaving the said fiber into a burlap of suitable width and 35 thickness, then applying a suitable compound to the woven fabric consisting of a mixture of asphaltum, resin, pitch creosote and oxid of iron, and finally securing the woven fabric to the exterior of the pile to be 40 protected, substantially as described.

In testimony whereof, I affix my signature

in presence of two witnesses.

CHARLES W. KENNON.

Witnesses:

E. K. H. D'AETH,

D. C. ROGUERE.