

(No Model.)

E. DENSMORE.
SURGICAL SPLINT.

No. 485,178.

Patented Nov. 1, 1892.

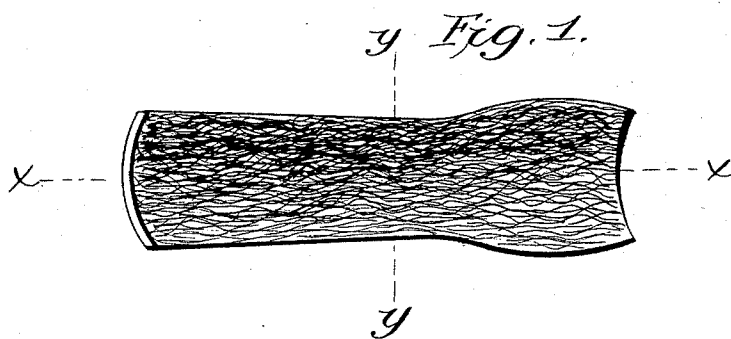


Fig. 2.



Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWIN DENSMORE, OF CORONADO, CALIFORNIA.

SURGICAL SPLINT.

SPECIFICATION forming part of Letters Patent No. 485,178, dated November 1, 1892.

Application filed April 22, 1892. Serial No. 430,224. (No model.)

To all whom it may concern:

Be it known that I, EDWIN DENSMORE, a citizen of the United States of America, residing at Coronado, in the county of San Diego and State of California, have invented certain new and useful Improvements in Surgical Splints, of which the following is a specification.

My invention relates to surgical splints. I have discovered that a surgical splint formed out of the stem of a variety of the yucca-palm may be made to combine all the desirable qualities of the splints heretofore made out of wood or metal with those made out of felt; and my invention consists of a surgical splint formed out of a sheet cut from the stem of the yucca-plant, with the fibers running substantially lengthwise of the sheet.

I have illustrated a form of splint in the accompanying drawings, in which—

Figure 1 shows an edge view of the splint; Fig. 2, a cross-section on line *xx*; Fig. 3, a cross-section on line *yy* of Fig. 1.

In manufacturing splints according to my invention I cut sheets from the stem of the yucca, preferably by means of a veneer-lathe, which cuts around the stem, forming sheets of any desired size and thickness. These sheets are composed of a loose fibrous texture, in which the fibers are to a large extent interwoven or matted, although the general direction of the fiber is lengthwise of the stem. There is no distinct grain, as in the case of wood, and the sheet is porous to a high degree through the thickness of the sheet, as well as longitudinally. The sheet also has considerable stiffness in the direction of the

length of the stem, but is flexible laterally or or across the general direction of the fiber. Having sheets so formed, I cut the blank into the desired shape or contour and then press it into the proper form to correspond to the part of the body to which it is applied.

The molds in which the blanks are pressed should be made of brass or some metal which will not be acted upon by the moisture in the blank in order to avoid staining the splint, and should be perforated to permit the escape of the moisture. The blanks are held in the mold and pressed until they are dry, when they retain perfectly the form in which they are pressed.

While the material is of the rigidity required, it is very light. It is so porous that water or air will pass readily through the sheets, and it therefore can be saturated with antiseptics if desired. The absence of grain, or the peculiar nature of the fiber of which it is composed, (it being of uniform texture throughout), renders it possible to mold the sheets into any desired shape, and this shape is retained after the blanks are dried in the mold.

I do not limit myself to the particular form of the splints shown.

I claim as my invention—

A surgical splint formed of a sheet of yucca-stem, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN DENSMORE.

Witnesses:

CHAS. A. FIEWEGER,
A. J. ARMSTRONG.