To all whom it may concern:

Be it known that I, Mathilde Reinhardt Cords, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Pine-Needle Stuffing for Mattresses, &c., and Process of Making the Same, of which the following is a specification.

My invention relates to an improved stuffing for mattresses, cushions, pillows, and the like, the object of my invention being to provide material possessing hygienic and therapeutic properties and the emanation from which will not only be agreeable and refreshing, but will also assist in relieving and curing cases of consumption and other ailments.

For this purpose I provide a fiber made from pine-needles prepared in such a manner as to retain the peculiar aroma of the pine-needle. The natural odor of the pine-needle clings to my improved fiber as long as the fiber itself lasts. This odor is not only aromatic, but extremely healthful and curative in cases of pulmonary troubles, bronchitis, rheumatism, and other ailments.

My improved pine-needle fiber is strongly antiseptic in its properties, it repels vermin of all kinds, and it will not convey contagious diseases from one person to another.

My invention is distinguished from pine-needle fiber heretofore produced, first, in its color, it being of an olive-brown color rather than brown; secondly, the fiber is long and not brittle, it will not crumble or break if rolled in the hand, and it possesses peculiar tenacity and durability; thirdly, the fiber may be washed and dried repeatedly without depriving it of any of its natural aroma or rendering it brittle. These peculiar properties of my improved fiber depend on the fact that it is prepared in such a manner as to retain the natural oil of the pine-needle.

My invention therefore also resides in the improved method or process of making the above article.

The fiber is prepared in the following manner: The pine-needles are heated in large tanks under pressure higher than atmospheric pressure and preferably under about one pound additional pressure per square inch, the liquid being heated to its boiling-point under this increased pressure for twelve hours. Thirty-six to forty gallons of water are used for each one thousand pounds of needles. The water is then drained off and cold water is run in and brought to a boiling-point, and the material is boiled for another six hours. The heat is then cut off and the material and water are allowed to cool for six hours. The needles are then removed from the tanks and run through a crushing-machine. They are then placed in a water-tank and agitated in said tank. They are then removed and placed in a centrifugal separator to dry the same. They are then run through a picking-machine, which picks and loosens the fiber. The fiber is then dried in a kiln at a temperature of 125° to 130° Fahrenheit. The fiber is then again run while warm through a picking-machine and then baled in the press-machine.

I am aware that pine-needle fiber has here-tofore been used for the purpose for which mine is intended; but such fiber differs from mine in that the aroma of the pine-needle is added thereto externally. With such prior fiber the essence of the pine-needle is extracted from the needles in preparing the fiber, so that the fiber itself is deprived of its natural aroma, and then after the fiber is dried the essence is applied thereto externally.

Such a fiber will not stand washing and drying without loss of its aroma, as will mine. Furthermore, in consequence of the essential oil of the pine having been extracted therefore from the process of preparing the fiber, the fiber is thereby rendered brittle and easily crumbles and breaks into pieces when rolled or twisted by the hand.

I claim—

1. As a stuffing for mattresses, cushions, and the like, an improved pine-needle fiber from which the pine-needle oil has not been abstracted and which is characterized by being of an olive-brown color, comparatively long, tenacious, and capable of being washed and dried repeatedly without losing the natural aroma of the pine-needle which it possesses, substantially as described.
2. The process of preparing pine-needle fiber which consists in boiling the pine-needle under high pressure, draining off the water, adding cold water and again boiling the same, allowing the material and water to cool, separating the material from the water, crushing the material, putting the material in a water-tank, drying the same, picking and loosening the fiber, drying the fiber with heat of a high temperature, and picking the fiber while still warm, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

MATHILDE REINHARDT CORDES.

Witnesses:
FRANCIS M. WRIGHT,
O. C. PRATT.