## United States Patent Office.

JOHN W. STILL, OF SAN FRANCISCO, ASSIGNOR TO FRANKLIN PANCOAST, OF ALAMEDA, CALIFORNIA.

Letters Patent No. 114,219, dated April 25, 1871.

## IMPROVEMENT IN FIRE-KINDLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN W. STILL, of the city and county of San Francisco, State of California, have invented an Improved Fire-Kindler; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The object of my invention is to provide an improved substance or prepared material which will serve for kindling fires and other similar purposes,

and which I call coco pino.

To prepare my fire-kindler I take either the fibrous covering of the cocoanut, known as cocoa fiber, or the bark of the California red-wood tree, and dip it in boiling or melted pitch or resin, or other highly-combustible gum. It is allowed thus to remain immersed until it has become thoroughly charged and covered with the pitch, when it is taken out and allowed to cool. It will then be found to be readily lighted, and a small piece be capable of lighting either coal or

wood when employed in the ordinary way of using fire-kindlers.

If desired, the fiber or bark can be dipped in some one of the hydrocarbon oils previous to being dipped in the melted gum, and thus be rendered much more inflammable than when the pitch or gum alone is used.

This fire-kindler will be cleanly to handle, cheap, light, and very serviceable.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. Cocoa fiber or red-wood bark, prepared as above described, for the purpose specified.

2. As a new article of manufacture, a fire-kindler composed of cocoa fiber or red-wood bark, prepared as above described.

In witness whereof I have hereunto set my hand and seal.

Witnesses: JOHN W. STILL. [L. s.]

WM. H. RUNNELS, GEO. H. STRONG.