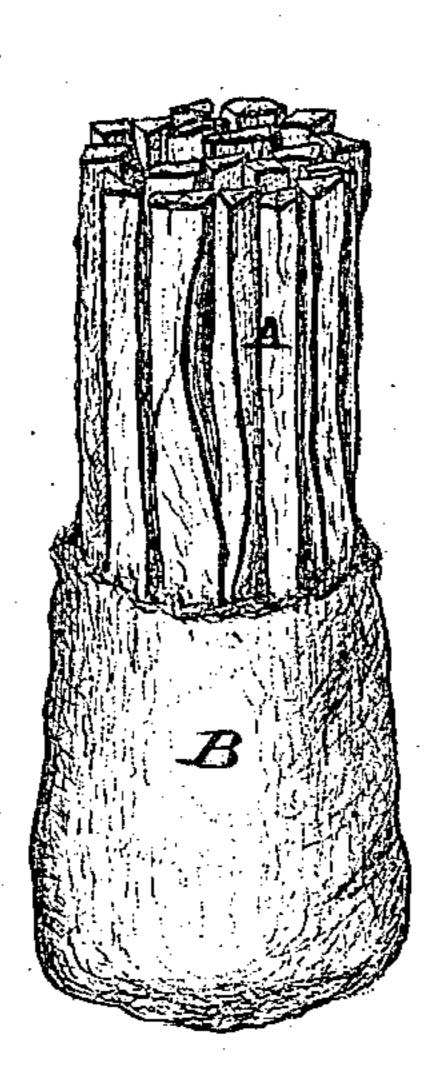
## WIGGINS & STOUT.

Fire Kindler

No. 103,951.

Patented June 7, 1870.



C.S. Brown Som Minight William J. Wiggins Charles Stort

## Anited States Patent Office.

WILLIAM J. WIGGINS AND CHARLES STOUT, OF ST. LOUIS, MISSOURI.

Letters Patent No. 103,951, dated June 7, 1870.

## IMPROVEMENT IN FIRE-KINDLING FAGOTS.

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

We, WILLIAM J. WIGGINS and CHARLES STOUT, both of the city and county of St. Louis, and State of Missouri, have invented a certain Fire-Lighter, of which the following is a specification.

Nature and Objects of the Invention.

Our invention relates to a fire-lighter which is easily ignited by a common match, and which burns a sufficient length of time, and with sufficient intensity to light a coal fire; and said invention consists in the application to a bunch of split sticks or slivers, consisting, preferably, of soft and hard wood, as pine and oak, of a wrapping of waste hemp or other equivalent substances, and coating of the same with resin, and one end thereof with coal slack, as hereafter stated.

General Description with Reference to the Drawing.

The drawing is a perspective view of one of our fire-lighters, in which—

A denotes the sticks, splints, or slivers; and

B, the wrapping, the whole being coated with common resin.

In making the lighter according to our preferred manner, we have prepared a quantity of split sticks, splints, or slivers of soft wood, such as pine, and hard wood, such as oak, each splint being about eight inches in length and half an inch in diameter, although these dimensions are not essential, and, in practice, will vary considerably. We first take about five splints of the hard wood and surround them by a sufficient number of splints of the soft wood to form a bundle about two and a half inches in diameter. This bundle is then immersed in a vessel containing melted resin, and, on being withdrawn therefrom, one end thereof is rolled in coal-slack, so as to cause a quantity of the slack to adhere thereto. The end which is coated with the slack is then wrapped with waste hemp and fine shav-

ings of wood, known to the trade by the name of excelsior, and used extensively in the stuffing of mattresses. After the wrapping, the whole is immersed in melted resin, and, upon withdrawal therefrom, is rolled in sawdust.

In using our lighter, it is kindled with a match and laid among the coal, and, the resin becoming melted, saturates the hemp and other matters, which are thus made to form a blazing ball that retains an intense heat for a considerable time, so as to cause the ignition of the coal.

We have given the preferred construction of our fire-lighter, but, if desired, only one kind of wood might be used, and, in place of the hemp and "excelsior," any similar substance or substances might be used for a wrapper. The saw-dust is not essential, but prevents the lighters from adhering together when piled immediately after immersion, and prevents, to some extent, the rubbing off of the resin in subsequent handling.

## Claim.

We claim as our invention—

The fire-lighter, herein described, consisting of a bundle of sticks coated with resin, and afterward covered at one end with a body of coal-slack, and wrapped, either wholly or in part, with fibrous or other suitable material, the coal-coated end serving to maintain combustion for a longer period, while the other end admits of being readily ignited with a match.

In testimony of which invention we hereunto set our hands.

WILLIAM J. WIGGINS. CHARLES STOUT.

Witnesses:

C. S. Brown, Samuel Knight.