

# United States Patent Office.

WILLIAM PORTER, OF ST. STEPHEN, CANADA.

Letters Patent No. 107,810, dated September 27, 1870.

## IMPROVEMENT IN THE MANUFACTURE OF FRICTION-MATCH CIGAR-LIGHTERS.

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, WILLIAM PORTER, of St. Stephen, in the Province of New Brunswick, in the Dominion of Canada, have invented certain new and useful Improvements in Friction-Matches; and do hereby declare that the following is a full, clear, and exact description thereof.

The purpose of this invention is the production, for the use of tobacco smokers, of a convenient friction-match, which shall ignite readily by contact, which shall burn a considerable length of time, and retain its fire when exposed to wind and rain; and

The invention consists in the composition employed for the above-named purpose, coated, upon the ends of wooden splints, strips of card, or other like material.

This composition is a mixture, by weight, of ten (10) parts of chlorate of potassa, thirty (30) parts of purified nitrate of potassa, and thirty-eight (38) parts of powdered hemlock bark, or similar vegetable substance or substances, together with a sufficient quantity of solution of glue or adhesive gums, that the whole may, by mixture, form a paste of sufficient density.

Into this paste thus composed the splints of wood or strips of card are dipped, at either or both ends, so that a sufficient portion of the composition will adhere to them, and, when properly dried, are fit for packing or immediate use.

The advantage of the hemlock bark lies in its ability to retain fire after being kindled for a long time, and in spite of wind or rain.

These matches are ignited by contact with any other substance, in the usual manner.

Having thus described my composition, and the manner of its application and use,

What I claim therein as my invention is—

The composition above described, prepared and applied substantially as and for the purpose set forth.

In testimony that I claim the foregoing, I have hereto set my hand and seal the 3d day of September, 1870.

WILLIAM PORTER. [L. s.]

Witnesses:

A. HALLIDAY,  
L. D. SAWYER.