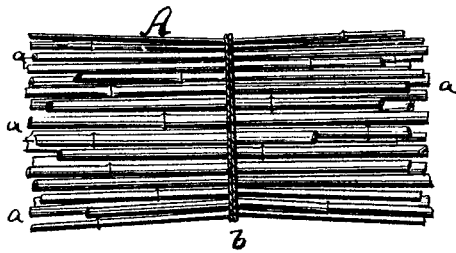


F. D. CORDES.  
FIRE-KINDLER.

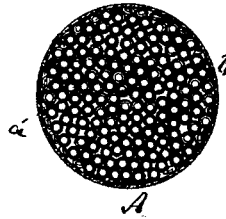
No. 183,908.

Patented Oct. 31, 1876.

*Fig: 1*



*Fig: 2*



*Witnesses:*

*A. Moraga*  
*Dr. Friesen*

*Inventor*

*Fred<sup>k</sup> D. Cordes*  
*by his attorney*  
*Dr. Friesen*

# UNITED STATES PATENT OFFICE

FREDERICK D. CORDES, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS  
RIGHT TO ANDRÉ GEIGER, OF SAME PLACE.

## IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **183,908**, dated October 31, 1876; application filed  
September 1, 1876.

*To all whom it may concern:*

Be it known that I, FREDERICK D. CORDES of New York city, N. Y., have invented an Improved Fire-Kindler, of which the following is a specification:

Figure 1 is a side view, and Fig. 2 an end view, of my improved fire-kindler.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to a new construction of fire-kindler, and consists in making the same of a bundle of parallel pieces of straw or other tubular halms, which are filled and covered with melted resin, pitch, or other easily combustible material.

Fire-kindlers were heretofore made of wood, corn-cobs, and even of compressed straw, leaves, or the like, and covered with combustible substance. But by bundling the hollow halms according to my invention I am enabled to fill each halm, besides covering it, with the combustible matter, and thus to produce a more perfect kindler than could heretofore be done.

In the drawing, the letter A represents my improved fire-kindler. The same is made of halms *a a* of dried straw or equivalent tubular stalks, all nearly of equal length, and unpressed, so that their ends are open. The halms *a a* are, by a suitable cord or tie, *b*, tied into a bundle, and the bundle thus produced is immersed in molten resin, or other liquid or semi-liquid combustible substance, which will coat each halm and also enter the interior thereof. When the combustible matter adhering to the halms after said immersion has become dry, the kindler is completed.

I claim as my invention—

A fagot in which the combustible material is contained in and carried by hollow stalks bound together, as set forth.

FREDERICK D. CORDES.

Witnesses:

ERNEST C. WEBB,  
A. V. BRIESEN.