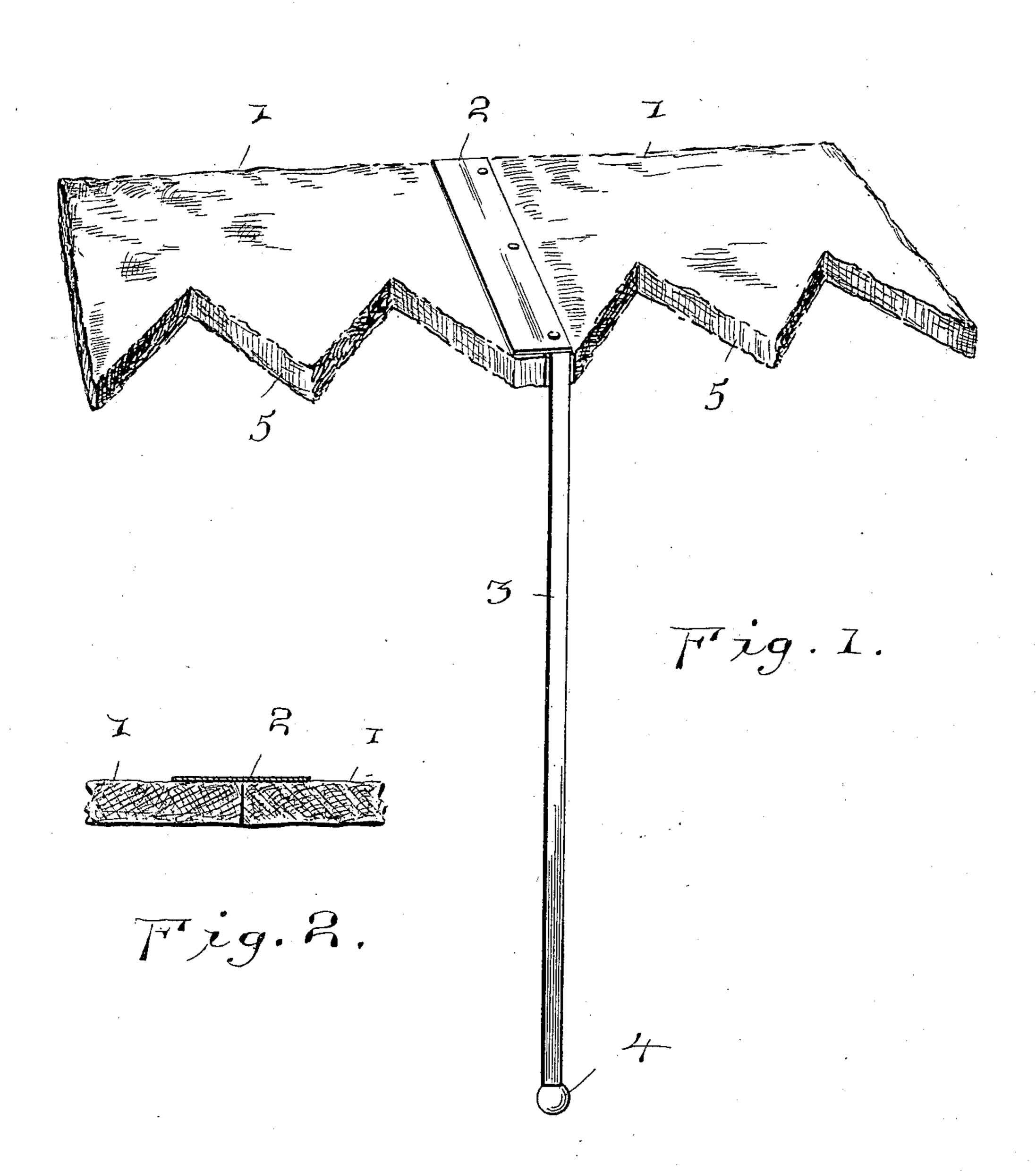
## R. HAGER. FIRE KINDLER. APPLICATION FILED APR. 9, 1903.

NO MODEL.



WINESSES: Viley
Archit D'Lawson.

Robert Hager.

By Wetter G. Evane,

Attorney

## United States Patent Office.

ROBERT HAGER, OF ST. LOUIS, MISSOURI, ASSIGNOR, BY MESNE ASSIGN-MENTS, OF ONE-HALF TO JOSEPH J. HAUER, OF ST. LOUIS, MISSOURI.

## FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 754,062, dated March 8, 1904.

Application filed April 9, 1903. Serial No. 151,861. (No model.)

To all whom it may concern:

Be it known that I, Robert Hager, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented new and useful Improvements in Fire-Kindlers, of which the following is a specification.

My invention relates to new and useful improvements in fire-kindlers; and its object is to provide a highly-combustible device which can be folded into compact form and which is so constructed as to fit upon a grate without obstructing the draft therethrough.

A further object of the invention is to so construct the kindler as to permit it to be folded so as to adapt it to grates of different sizes.

Another object is to provide a fuse by means of which the kindler can be readily ignited.

With the above and other objects in view the invention consists in the novel construction and combination of parts, hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of the kindler, and Fig. 2 is a section through the adjoining ends of the sections thereof.

Referring to the figures by numerals of reference, 11 are sections of the kindler, which are 3° secured together at their adjoining ends by means of a strip of tar-paper 2 or any other suitable combustible material. This strip is secured to the sections by means of glue or in any other manner and serves to connect to said 35 sections a tape 3, which is preferably paraffined and is provided with a small weight 4 at | is claimed as new is the free end thereof. The sections of the kindler are adapted to be folded upon each other into a compact bundle and can be placed upon 4° a grate either in that condition or after the parts have been extended, as shown in Fig. 1. One of the edges of the kindler is preferably toothed or cut away, as illustrated at 5, so as

to permit air to pass through the grate after the kindler has been placed in position thereon. 45 The sharp points or teeth formed in this manner also permit the kindler to become readily ignited from the fuse.

The kindler is preferably constructed of a composition of paper-pulp, sawdust, and pul- 50 verized charcoal used in proportions of two parts of pulp, five of sawdust, and one of charcoal. These are moistened and thoroughly mixed and then pressed into proper form and dried, after which the kindler is saturated in 55 rosin diluted in coal-oil and is then ready for When the kindler is in position upon the grate, the weighted fuse is dropped between the bars and will hang suspended therefrom in a position where it can be readily ig- 60 nited. The flame will pass from the fuse to the highly-combustible kindler. The paperpulp serves to bind the other parts of the kindler together. The sawdust constitutes the body of the device, and the charcoal serves to 65 give it an intense heat. In using this kindler it is unnecessary to employ wood in addition thereto, as the coal can be placed directly thereupon and will be ignited thereby.

In the foregoing description I have shown 70 the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve 75 the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a fire-kindler, the combination with 80 combustible sections having teeth formed along one edge of each section; of an inflammable strip connecting said sections and forming a hinge, a fuse connected to the inflammable hinge-strip, and a weight upon the free 85 end of the fuse.

2. In a fire-kindler, the combination with combustible sections; of an inflammable strip secured to the adjoining edges of the sections and forming a hinge, and teeth at one edge of each section.

3. In a fire-kindler, the combination with sections formed of combustible material and having teeth at one edge of each section; of an inflammable hinge-strip connecting the sec-

tions whereby the same may be folded upon to each other.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT HAGER.

Witnesses:

GEO. A. SLATERY, JAS. J. HANE.