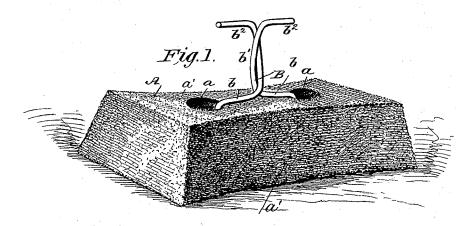
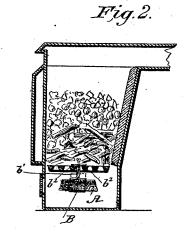
(No Model.)

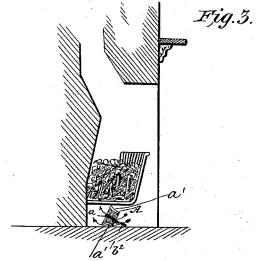
## A. D. L. GATHEMANN. FIRE KINDLER.

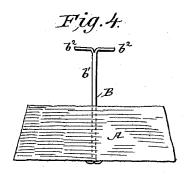
No. 418,316.

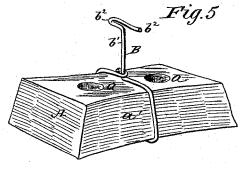
Patented Dec. 31, 1889.











WITNESSES: Fred J. Duterich Jos. a. Sugam INVENTOR:
Anton D. L. Gathemann
BY When of

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

ANTON DIETRICH LUDWIG GATHEMANN, OF BALTIMORE, MARYLAND.

## FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 418,316, dated December 31, 1889.

Application filed February 16, 1889. Serial No. 300,197. (No model.)

To all whom it may concern:

Be it known that I, ANTON DIETRICH LUDWIG GATHEMANN, of Baltimore city, in the State of Maryland, have invented a new and useful Improvement in Fire-Kindlers, of which the following is a specification.

My invention relates to that class of kindlers formed of a composition such as fireclay, sand, and sawdust, which are specially prepared so as to retain the combustible ma-

terial for a long time.

My invention consists in a certain combination, with sand prepared blocks, of a supporting device connected therewith, the particular arrangement and combination of which will hereinafter be fully described in the annexed specification and claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved fire-kindler. Fig. 2 is a view of the same as suspended beneath a grate. Fig. 3 shows the same as in use below a low grate, and Figs. 4 and 5 are views of modifications

25 hereinafter referred to.

In the accompanying drawings, A denotes the kindler or block proper, which is preferably formed of clay, sand, and asbestus baked in the usual manner to render the same por-30 ous for the retention for a considerable length of time of the combustible material with which it is treated when ready for use. It is well known that kindling-blocks prepared in this manner retain the combustible mate-35 rial for a considerable period, and when placed inside of the stove they may remain therein until the fire is put out. The manner of using the blocks as last described is, however, very objectionable, as by their constant con-40 tact with the fire they soon become split or broken, which renders them worthless. To obviate this objection, I provide the said blocks with a suitable supporting device, whereby the same may be quickly connected 45 with the grate from below, and by means of which the block will be always held in close connection with the fuel to be lighted. Bdenotes the said supporting device, which consists of a stout piece of wire, the ends of which pass through perforations a a in the block A. Said ends are bent toward each other over the vertical stem b', as shown. The ends  $b^2 b^2$  are then bent in opposite directions, forming fingers or prongs, which project over adjacent 55 grate-bars and support the block, as clearly shown in the drawings.

When it is desired to use the kindler in connection with a fire-pot where the grate is too low to admit of the block to be suspend- 60 ed beneath the same, it is placed in the position shown in Fig. 3, the supporting device forming a support for the kindler when the same is canted on its edge, as shown.

same is canted on its edge, as shown.

To permit of the ready circulation of air 65 about the block when the same is used in the manner last described, I form the same with slightly-concaved sides, as at a' a', thereby allowing the air to pass beneath the block, as shown by arrows in Fig. 3. The apertures a 70 a in the block also provide for additional

means of air-circulation.

When the kindler is used in connection with a grate in the manner shown in Figs. 1 and 2, the same is placed beneath the same 75 with its long axis parallel with the gratebars. The supporting device is then pushed up between two of the bars, as shown in dotted lines, Fig. 2. The same is then given a half-turn, which projects the fingers  $b^2b^2$  over 80 the grate-bars, and thereby supports the kindler, as shown.

Instead of forming and connecting the supporting device as shown in Figs. 1, 2, and 3, the same may be constructed as shown in Fig. 85 4 of the drawings, which shows a wire rod passed through a central perforation in the block, the upper end of which is split and formed into prongs bent in opposite directions; or the same may be constructed as 90 shown in Fig. 5, which illustrates a single wire looped about said block extended upward, the end of which is bent laterally and back upon itself and extended beyond the point of its first bend, thereby forming two 95 lateral extensions, as shown.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

is---

notes the said supporting device, which consists of a stout piece of wire, the ends of which pass through perforations a  $\alpha$  in the block A. Said ends are bent toward each other over the block, as at b b, then twisted to form a short

outer end, whereby said block may be suspended under the grate-bars when used under a high grate and forming a support for said block when said block is tilted on its 5 side under a low grate, substantially as shown, and for the purpose described.

2. The combination, with the block A, provided with air-passages a a, passing through the body thereof, concave sides a' a' forming 10 air-passages beneath the block when said block is tilted on its sides, of the supporting

device B, consisting of a rod or wire secured to the block at its lower end, as shown, its free end projected, as at b', and bent upon itself, as at  $b^2$   $b^2$ , forming lateral arms for supporting the block on the grate-bars, substantially as and for the purpose described.

ANTON DIETRICH LUDWIG GATHEMANN.

Witnesses:

GEO. SAVAGE, ARCHIBALD H. TAYLOR.