J. P. WAGNER.

Fire-Kindler.

No. 197,188. Patented Nov. 13, 1877.

Fig. 1.

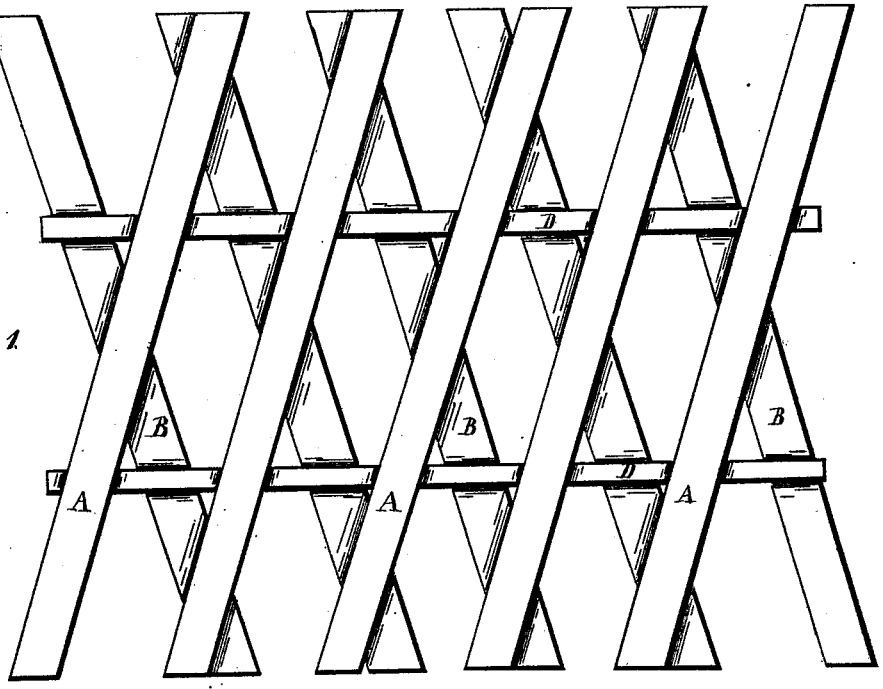



Fig. 2.

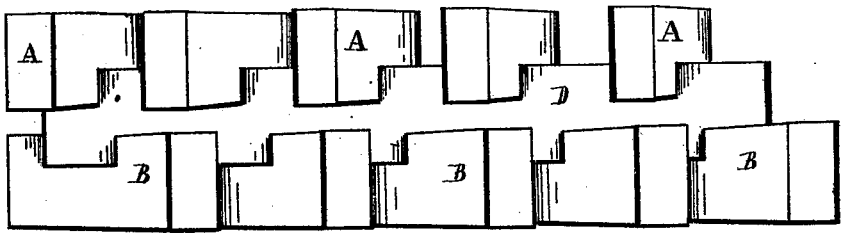
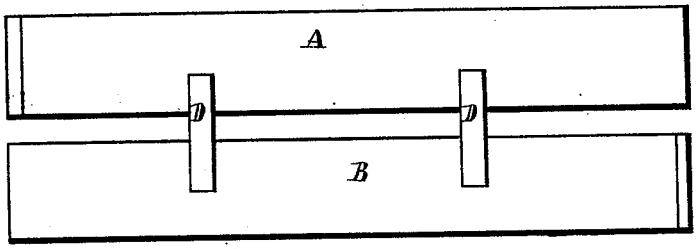



Fig. 3.




Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **197,188**, dated November 13, 1877; application filed April 14, 1877.

*To all whom it may concern:*

Be it known that I, JOHN P. WAGNER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Fire-Kindler; and I do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawings, making a part of the same.

Figure 1 is a plan view of the fire-kindler. Fig. 2 is a side view. Fig. 3 is an end view.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to a fire-kindler.

Said kindler is composed of two series of strips of wood, arranged one above the other in a diagonal direction. The two series or sections of strips of wood are connected to each other by tie strips or binders, to which the diagonal strips are gained in, and thereby bound together, substantially as hereinafter described.

The two sections or series of strips of wood referred to are represented at A and B, Fig. 1, each of which comprises five strips, but which, however, may be more or less, according to the size of the kindler required. The strips of one section are arranged diagonally in respect to the strips of the other section, as shown in the drawings. The two sections are connected to each other by ties or binders D, which are let into the edges of the strips A and B by having gains cut in them for the reception of the ties, substantially as shown in the drawings.

In uniting the strips to each other by ties, as above described, no nails are used for uniting the several parts of the kindler, as the ties hold the strips firmly to each other and in their diagonal relation.

In placing one section of strips above the other, and uniting them, as herein described, the wood or strips are in the best possible position for burning, by allowing a good and sufficient draft of air through the spaces between the strips, and which at the same time permits small lumps of coal to fall down between, and thereby become more directly in connection with the lower part of the kindler than if the coal all remained on the top.

One surface of the strips is to be covered with a coating of tar, rosin, or paraffine, or with any other suitable combustible material or compound that will produce an immediate ignition of the strips on being fired.

Fine shavings, chips, or sawdust may or not be sprinkled over the combustible coating to make salient points for igniting the kindler.

What I claim as my invention, and desire to secure by Letters Patent, is—

As a new article of manufacture, a fire-kindler consisting of a section of wood strips, A, arranged parallel in relation to each other, and a section of strips of wood, B, arranged parallel in relation to each other, and diagonally in their relation to and in combination with the strips A, to which they are united by interposed binders D D, inserted in gains cut in said sections of strips, and the structure treated with a coating of combustible material specified, in the manner substantially as described.

JOHN P. WAGNER.

Witnesses:
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