## UNITED STATES PATENT OFFICE.

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## FIRE-KINDLING COMPOUND.

947,101.

Specification of Letters Patent.

Patented Jan. 18, 1910.

No Drawing.

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To all whom it may concern:

Be it known that I, John J. Gohl, a citizen of the United States, residing at Petoskey, in the county of Emmet and State-of Michigan, have invented certain new and useful Improvements in Fire-Kindling Compounds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in fire kindling compounds and my object is to provide a mixture of suitable combustible materials and reduce the same to a solid state, whereby the compound may be readily handled and applied to use.

A further object is to employ ingredients
which are highly combustible and at the
same time produce a non-explosive article
and one that is substantially odorless and a
still further object is to provide a compound
which will not crumble or disintegrate when
ignited, but will remain in a compact form

until practically consumed.

In compounding my improved fire kindler, I employ rosin 43½%, tar 13%, Burgundy pitch 4½%, pulverized charcoal 13%
30 and ground wood 26%, the rosin, tar and pitch being heated to a molten state and the charcoal and wood then added thereto, when the parts are thoroughly commingling by agitating or stirring the ingredients. When 35 the ingredients have been properly commingled, the mixture is permitted to partially cool and then spread upon a suitable receptacle and cut into blocks of the proper size or run into suitable molds prepared for that purpose. As soon as the articles thus formed have reached a solid state, they may be readily packed in boxes or otherwise prepared to be handled by the trade.

The rosin, or resin, aids combustion and to renders the mass or compound hard after

the ingredients have been melted and have become amalgamated. The rosin alone, however, would not sustain combustion and in order to compensate therefor, the pitch and pine tar, together with the Burgundy 50 pitch, are added, which, as well understood, are readily and instantly combustible, but which would burn too rapidly but for the presence of the rosin, or resin, hence the process of combustion is prolonged or lengthened, which promotes the kindling qualities of the compound or mass, as is obvious. The charcoal and ground wood also prolong the combustion process, in addition to furnishing a body for the other ingredients, 60 while the pitch and tar also provide for conveniently forming the mass or material into blocks for commercial purposes.

The blocks are formed of such size that a single block will be sufficient to ignite a 65 quantity of coal or wood under normal conditions and all that is necessary in producing a fire is to place one of the blocks on the grate of the stove and place thereover coal, wood or other combustible material and then 70 apply a match to the block of kindling material and in view of the combustible materials employed in compounding the kindler, an intense heat will be produced.

What I claim is:

A fire kindler consisting of resin 43½ per cent., pine tar 13 per cent., pitch 4½ per cent., pulverized charcoal 13 per cent., and ground wood 26 per cent., the resin, tar and pitch being heated to a molten state and the charcoal and wood being subsequently added, the parts being then thoroughly agitated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN J. GOHL.

Witnesses:

MARCUS SWIFT, J. D. ROBINSON