

UNITED STATES PATENT OFFICE.

THOMAS McC. BENNER, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **208,882**, dated October 15, 1878; application filed March 18, 1878.

To all whom it may concern:

Be it known that I, THOMAS McC. BENNER, of Allegheny, in the county of Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Fire-Kindlers; and I do hereby declare that the following is a full and exact description thereof.

My invention relates to an improvement in kindlers for fires; and consists in the combination of wood shavings, sawdust, resin, tallow, glue, water, and petroleum and paraffine oils, said ingredients being mixed and formed into blocks of suitable size for kindling.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

The shavings and sawdust, about twenty-eight parts, by weight, of each, are mixed together. About six (6) parts and four (4) parts of tallow, by weight, are melted and mixed with thirty-two (32) parts, by weight, of petroleum-oil, and the same quantity of paraffine-oil. This mixture—resin, tallow, and oils—is poured over the shavings and sawdust, stirring the shavings and sawdust thoroughly, so that the whole is brought in contact with the oleaginous compound. About six (6) parts, by

weight, of glue are dissolved in about fourteen (14) parts of water, which solution is poured over the shavings and sawdust, which has been treated as herein described, stirring the whole until all parts of the mass have been brought in contact with the solution of glue and water. The shavings and sawdust, after being treated as described, are then molded into blocks weighing about one-half pound each.

A fire-kindler composed of the ingredients stated will burn sufficiently slow to kindle a coal fire by the use of a single block, the solution of glue and water and the sawdust preventing the too sudden consumption of the shavings.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

A fire-kindler composed of shavings and sawdust treated with the oleaginous compound herein described, and subsequently treated with a solution composed of glue and water, as and for the purpose set forth.

THOS. McC. BENNER.

Witnesses:

A. C. JOHNSTON,

J. J. JOHNSTON.