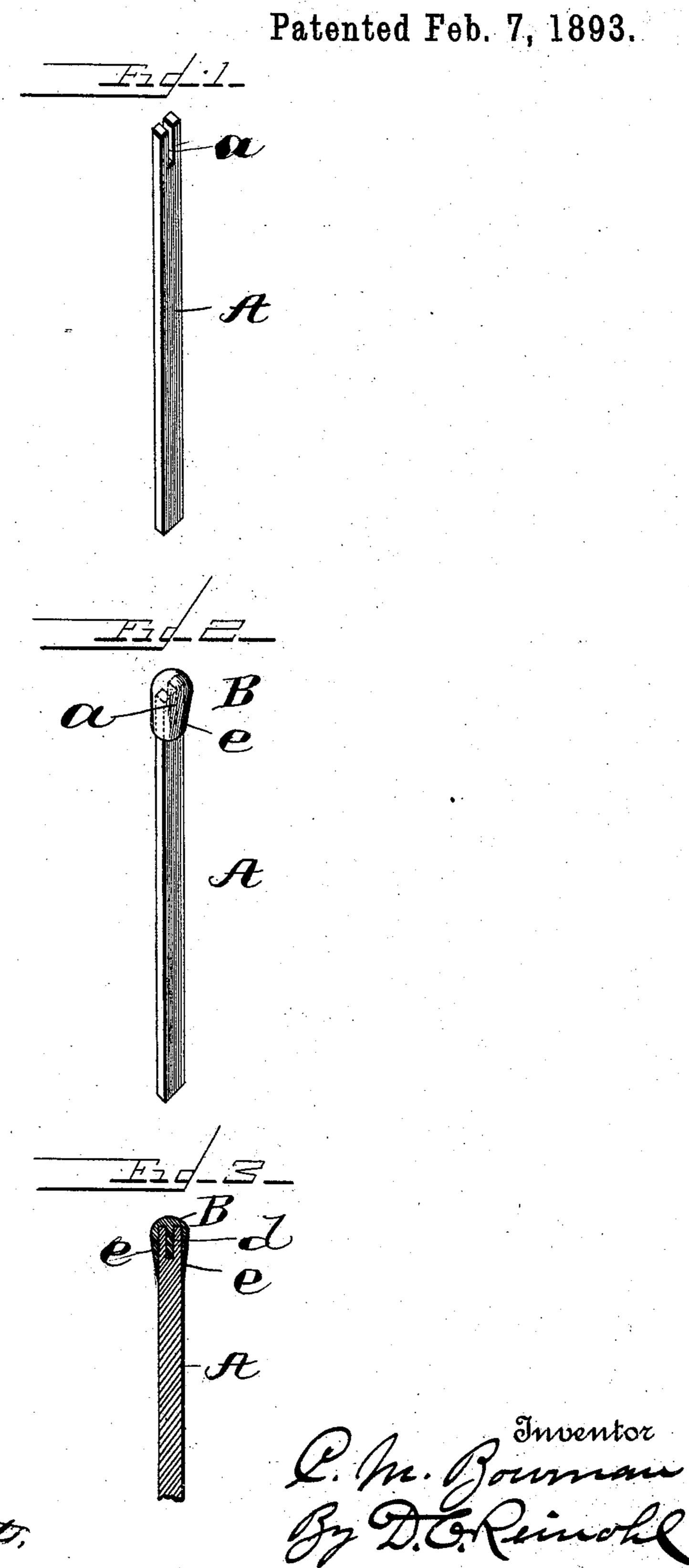
## C. M. BOWMAN. MATCH.

No. 491,204.



# United States Patent Office.

### CHARLES M. BOWMAN, OF LEBANON, PENNSYLVANIA.

#### MATCH.

SPECIFICATION forming part of Letters Patent No. 491,204, dated February 7, 1893.

Application filed May 9, 1892. Serial No. 432, 257. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. BOWMAN, a citizen of the United States, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Matches; 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 present invention relates to matches, and has for its object certain improvements in construction to secure the fulminate to the head of the match and prevent its displacement by striking the match without effecting

ignition of the fulminate.

The invention will be fully disclosed in

the following specification and claims.

In the accompanying drawings which form part of this specification Figure 1 is a perspective of a match splint of my improved construction. Fig. 2, a like view of a completed match, and Fig. 3, a vertical section.

Reference being had to the drawings and 25 the letters thereon, A indicates a match splint having parallel sides throughout its length, a portion thereof removed from the center of one end by means of a saw, forming a slot  $\alpha$ normally open, between two side walls or pro-30 jections b, b to receive fulminate, and leaving sufficient of the wood on each side of the slot a to prevent curling or warping when the splint is heated to prepare it for the paraffine bath, into which the splint is dipped before 35 the fulminate is applied. The splint retains its original external form throughout its length and is dipped in fulminate to a depth equal to or slightly in excess of the depth of fulminate receptacle, which fills the slot or re-40 ceptacle and forms a key therein and surrounds the end of the splint, as shown in Figs. 2 and By this construction of the splint the fulminate B forms a key d in the slot or fulminate receptacle, which is protected by the 45 walls or projections b, b and in conjunction with the body e of fulminate completely surrounds the end of the splint and prevents the fulminate being accidentally detached in handling, or broken off in striking a match 50 without igniting the fulminate and splint.

I am aware that it has been heretofore pro-

posed to split one end of a match splint at right angles into a number of parts or splinters to insure ignition of the match, but such a construction and operation are uncertain in 55 its results, for the reason that the incisions produced by a splitting machine are liable to be closed by the natural returning of the fibers of the wood as soon as the blades of the splitting machine are withdrawn; whereas by my 60 construction a portion of the splint is removed and forms an absolute fulminate receptacle into which the fulminate enters readily. I am also aware that a match splint has been proposed with a semi-spherical cavity 65 in one end, into which fulminate has been dropped leaving a portion of the end of the splint uncovered by fulminate. I am also aware that a match splint has been proposed with transverse concave recesses on two sides 70 of one end of the splint, which requires two distinct operations of a machine to produce them. I do not therefore claim any of said constructions, but

Having thus fully described my invention, 75

what I claim is.

1. An improved article of manufacture, a match having a portion of the splint removed from the center of one end forming a normally open slot, and the fulminate keyed into 80 and surrounding the splint.

2. An improved article of manufacture, a match having a slot in one end formed by removing a portion of the splint, and bounded on two sides by longitudinal projections, in 85 combination with fulminate keyed into said slot, surrounding the projections and completely incasing the end of the match.

3. A match splint having uniform parallel sides throughout its length, a portion of one 90 end removed forming a slot and provided with two parallel walls constituting a fulminate receptacle, in combination with fulminate keyed into the fulminate receptacle and incasing the end of the match.

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

#### CHARLES M. BOWMAN.

#### Witnesses:

J. F. ELLENBERGER, JNO. W. STAGER.