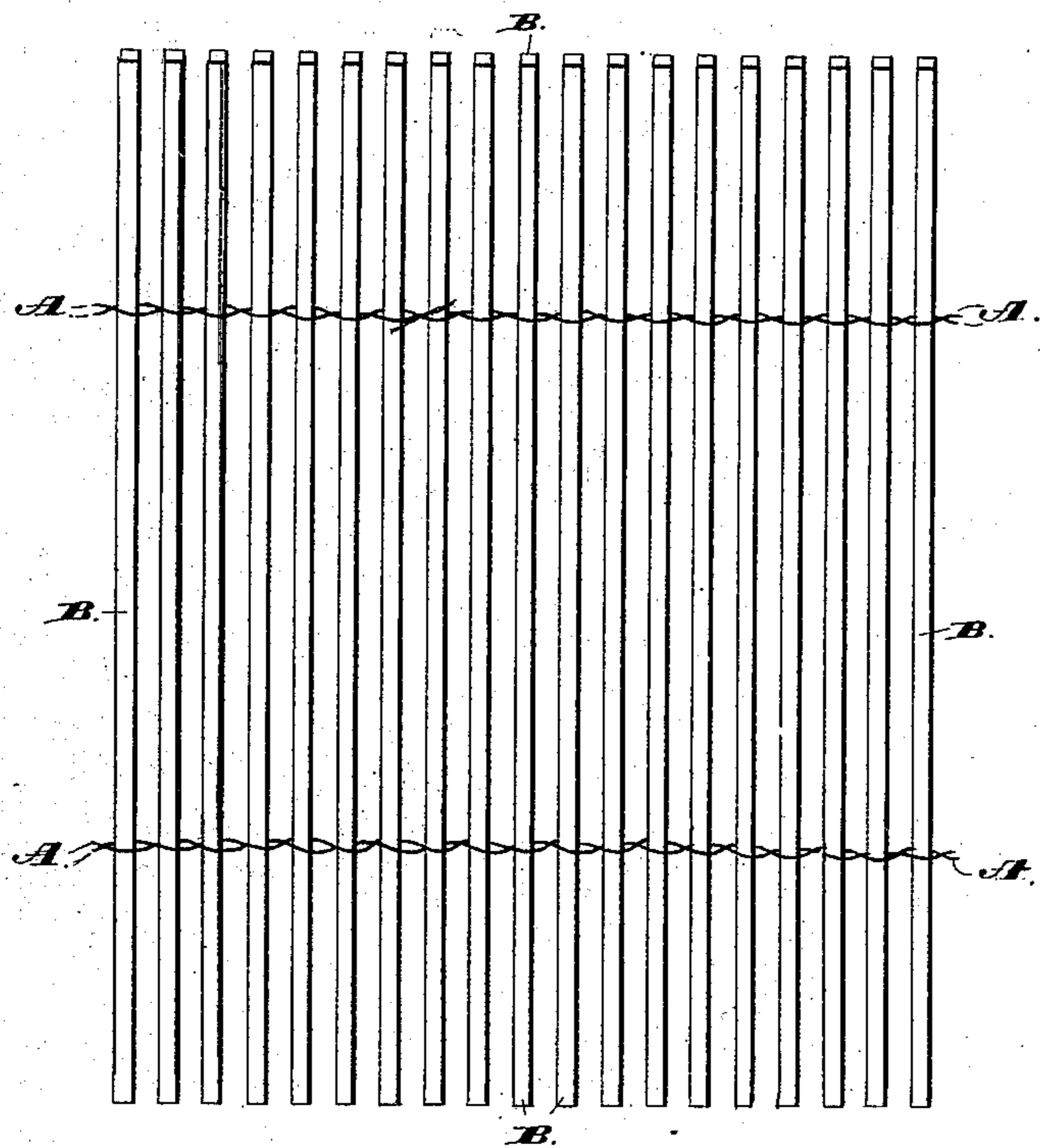


(Specimens.)

W. E. DOOLITTLE.  
MANUFACTURE OF MATCHES.

No. 347,265.

Patented Aug. 10, 1886.



Witnesses:

Jas. C. Hutchinson.  
Henry C. Hazard.

Inventor:

Wm. E. Doolittle, by  
Prindle and Russell, his Attys

# UNITED STATES PATENT OFFICE.

WILLIAM E. DOOLITTLE, OF NEW HAVEN, CONNECTICUT.

## MANUFACTURE OF MATCHES.

SPECIFICATION forming part of Letters Patent No. 347,265, dated August 10, 1886.

Application filed April 21, 1884. Serial No. 128,742. (Specimens.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. DOOLITTLE, of New Haven, in the county of New Haven, and in the State of Connecticut, have invented  
5 certain new and useful Improvements in the Manufacture of Matches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which is shown  
10 in perspective a series of match-splints secured in position for receiving the igniting material.

The design of my invention is to enable match-splints to be easily and cheaply secured in position for receiving upon their ends ignit-  
15 ing material; and to this end said invention consists, principally, in the method employed, substantially as and for the purpose herein-after specified.

It consists, further, in the means employed  
20 for confining the splints in relative position, substantially as and for the purpose herein-after shown.

In the use of my invention I employ a number of cords or narrow tapes, A, which are  
25 arranged in pairs at a suitable distance from each other, and correspond to the warp of a fabric being woven. Into such warp, which is manipulated so as to alternately separate the cords of each pair, is fed a series of match-  
30 splints, B, each of which corresponds to a thread of filling in ordinary fabric, and is closely held in place between said cords or tapes, of which one-half pass over and the other two pass under the said splints. The  
35 splints B are fed between the cords A, so as to cause the ends of the former to project to equal distances upon each side, in consequence of which said ends may be readily coated with igniting material, either as the operation de-  
40 scribed is going on, or at any subsequent time.

After the match-splints have had their ends coated they are cut in two centrally, when the parts become readily disengaged from the cords and may be packed.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. As an improvement in the manufacture of matches, the method of preparing the match-splints for the reception of the igniting material, which consists in connecting the splints  
50 together in a series by means of flexible connections, substantially as and for the purpose described.

2. As an improvement in the manufacture of  
55 matches, the method of preparing the splints for the reception of the igniting material, which consists in connecting the splints together by means of cords at right angles to the splints, substantially as and for the purpose described. 60

3. As an improvement in the manufacture of matches, the method of preparing the splints for the reception of the igniting material, which consists in arranging the splints in a continuous series between a number of cords passing  
65 over and under the splints in opposite directions, substantially as and for the purpose described.

4. In combination with a series of match-splints, cords running substantially at right  
70 angles to said splints, and caused to interlock therewith, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of  
75 April, A. D. 1884.

W. E. DOOLITTLE.

Witnesses:

GEO. S. PRINDLE,

RUFUS S. PICKETT.