G. G. DENNIS.

MAKING MATCHES.

No. 48,913. Patented July 25, 1865.

Fig 1.

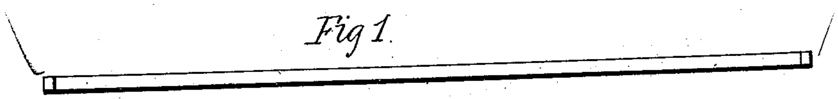
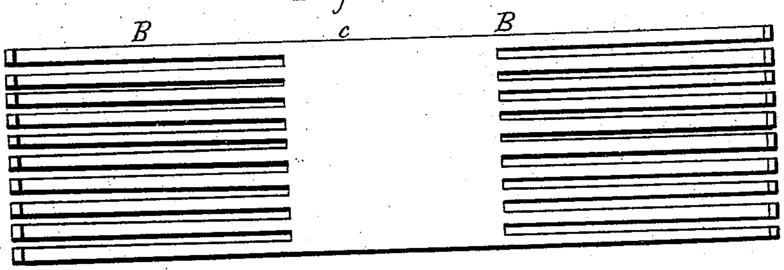
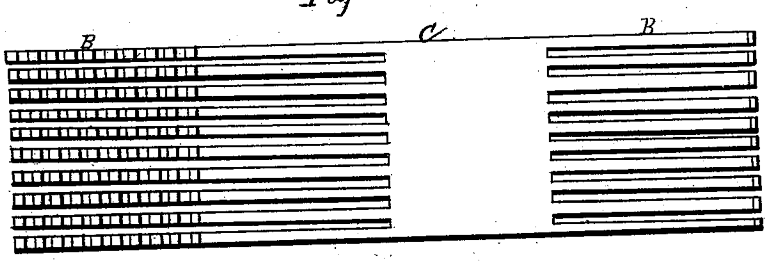


Fig 2.



Card.

Fig 3.



Witnesses:
Joseph Ricker Lovejoy.
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UNITED STATES PATENT OFFICE.

GIDEON G. DENNIS, OF DOVER, NEW HAMPSHIRE.

IMPROVEMENT IN THE MANUFACTURE OF FRICTION-MATCHES.

Specification forming part of Letters Patent No. **48,913**, dated July 25, 1865.

To all whom it may concern:

Be it known that I, GIDEON G. DENNIS, of Dover, Strafford county, State of New Hampshire, have invented certain new and useful Improvements in Friction-Matches: and I do hereby declare that the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in arming or applying the igniting materials to each or both ends of the match stock, splint, or stick, so that one end can be ignited to serve one occasion and the other end ignited to serve another occasion, thereby making the stocks or splints do double the service that they have done heretofore; also, in making match stocks or splints by cutting or sawing into each end of the block, sheet, or card of match stuff or material so as to leave the stocks or splints joined in the middle by a portion of the material so narrow that the splint can be easily and readily split or broken off when the matches are wanted for use.

In the above-mentioned drawings, Figure 1 is a friction-match stock or splint with the igniting materials applied to each end. Fig. 2 is a card or sheet of match material cut or sawed in at each end and left joined in the middle. Fig. 3 is a block cut or sawed in at each end so as to form stocks or splints upon both ends of the block and leave them joined in the middle by a portion strong enough to hold them together during the subsequent processes of dipping or charging each end with igniting materials or composition, yet leaving the middle connection, C, so small and slight that the splints B B may be easily and readily split or broken off to separate them when wanted for use. In each of these drawings the igniting material is shown in red at both ends of the splints.

In making my improved matches either of the well-known highly-combustible compositions may be used, some of which are described in American and foreign patents and several in H. Dussauce's treatise on friction-matches, gun-cotton, &c., published by H. C. Baird, Philadelphia, 1864. As matches are generally used only about one-quarter or one-third, at most, of the splint or stick is usually burnt, so that by applying the igniting composition to each end of the stick it is made to do double service and serve for two lightings instead of one. Hence in making my improved matches for a given number of lightings or kindlings one half of the lumber and one half of the labor in making the splints may be saved; and in all subsequent processes of manufacture—as dipping, &c.—there will only be one-half the number of blocks to handle to produce a given number of lightings; besides one-half of the boxes, both large and small, one-half of the paper and twine, and one-half of the labor of packing, and one-half of the transportation, and with all these savings the matches can be afforded far cheaper to the consumer.

What I claim as my invention and improvement in friction-matches is—

1. Arming or applying the igniting materials or composition to each or both ends of the match stocks or splints, so as to make each splint or stick serve for two lightings instead of one.

2. Making matches by cutting or sawing into each end of a block, card, or sheet of match material so as to leave the splints joined at the middle, substantially as described, and then applying the igniting material or composition to both ends of the stocks or splints so made or formed.

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