Feb. 7, 1928. 1,658,355

H. A. RUDD

CARD MATCHES

Filed Jan. 17, 1924

Fig. 1.

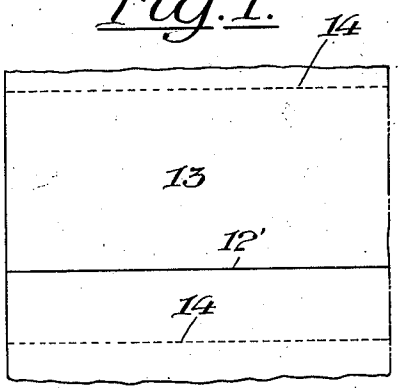


Fig. 2.

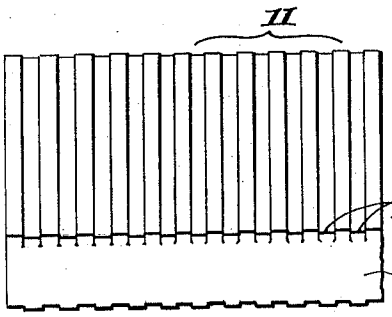
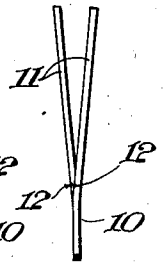


Fig. 3.



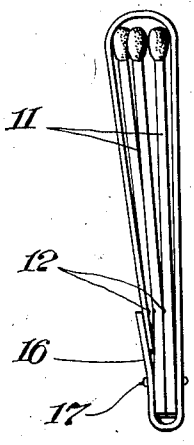


Fig. 4.

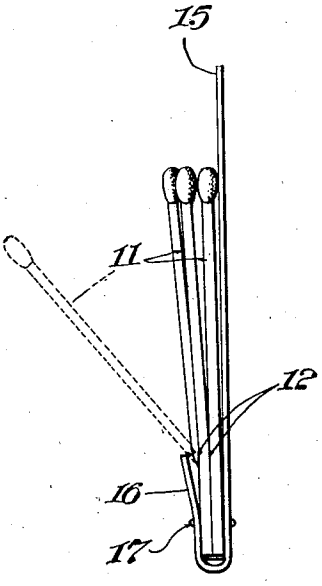


Fig. 5.

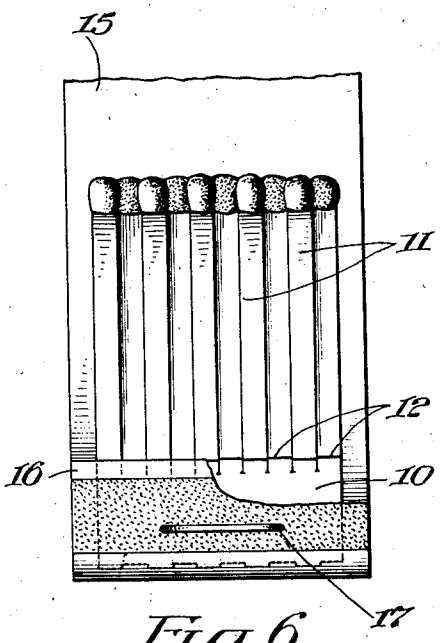


Fig. 6.

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UNITED STATES PATENT OFFICE.

HENRY A. RUDD, OF BARBERTON, OHIO, ASSIGNOR TO THE DIAMOND MATCH COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CARD MATCHES.

Application filed January 17, 1924. Serial No. 686,804.

This invention relates to that class of card matches wherein a row of splints projects from a common marginal portion from which they are intended to be individually separated, the alternate splints being laterally spread or staggered in order to space their free ends and permit the efficient application thereto of the paraffin and head compositions during the match making process. The invention has especial reference to so-called paper book matches wherein the match cards are associated with a flexible protective cover which is folded upon and secured to the margins of the cards in such a manner that each individual splint can be grasped and be torn from its integral marginal portion. In order to facilitate the removal of the splints it has been proposed to perforate or score the card on a line across the juncture of the splints with the marginal portion, but such disposition of the score line so weakens the material on the line of flexure incident to the spreading or staggering effect of the splint cutters that the connection between the margin and the splints is too fragile and flimsy to permit the operation of impregnating and dipping the splints on the match machine, wherein the margin is gripped and held by a traveling match card carrier.

According to my invention I score the blank sheet of paper material, before the formation of the card of matches, on a line which is so spaced from the edge of the card to be produced that the splints when they are cut and staggered have a transverse line of weakness a slight distance from and independent of the juncture of the splints with the marginal portion of the card. The match card thus formed is combined with the cover in such manner that the score line of the splints is in close parallel relation to the free edge of the fastened cover fold, which latter thus affords a rigid support upon which the scored portions of the splints can be readily bent to ensure their easy separation from the marginal portion of the card; all as hereinafter described and claimed.

In the drawings—

Figure 1 represents a portion of paper match stock transversely scored or indented preparatory to the cutting and staggering of the splints.

Fig. 2 shows a card of splints as cut from the scored stock.

Fig. 3 is an end view of the said card.

Fig. 4 is an end view of a book comprising a plurality of match cards and a flexible cover stapled thereon.

Fig. 5 is a similar view showing the book cover open and indicating the operation of separating one of the matches.

Fig. 6 is a front view of the book with the cover open and the stapled end fold partly broken away for clearness.

Referring to the drawings, 10 designates a narrow marginal strip of paper match material from one edge of which projects a row of splints 11, integral with the strip, which splints are treated with paraffin and are tipped with match composition in the usual manner to provide a card of matches. During the cutting of the splints the alternate splints are laterally spread or staggered, as best seen in Fig. 3, in order to space their free ends for the ready application thereto of the paraffin and head compositions. The body of each individual splint 11 is transversely scored or indented on a line 12 slightly beyond its junction with the marginal strip 10 in order to produce a line of weakness that facilitates the separation of the main portion of the splint from the card.

As illustrated in Fig. 1 the web 13 of material from which successive cards are to be made is transversely scored, as at 12′, before the operation of cutting and staggering the splints 11, and of separating the card of splints from the web along the dotted lines 14. Since the score line is located beyond the line of flexure of the splint the requisite rigidity of the splint to permit the operations of impregnating and dipping the same is maintained, as previously mentioned.

In Figs. 4, 5 and 6 are shown a series of my improved match cards associated with a suitable cover 15, whereof one end 16 is folded upon the margins of the cards and is secured thereto by a staple 17. The free edge of the fold 16 extends above the juncture of the splints with the margin and is in close parallel relation to the score line 12 of the splints, thus affording a rigid edge upon which the scored portion of each individual splint can be bent as indicated by the dotted lines in Fig. 5, and thus be broken off with ease and facility without any liability of disrupting the marginal portion or mutilating the adjacent splints.

I claim—

In combination, a match card and a flexi-

ble cover therefor, said card comprising a sheet of material having an integral marginal portion to which the cover is secured and a row of splints projecting from and alternately staggered at their juncture with said marginal portion, said splints having a transverse line of weakness spaced from the juncture of the splints with the marginal portion, and the said cover comprising a sheet of pliable material having an overlapping portion secured to the margin of the card and having a free edge in close parallel relation to the lines of weakness of the splints.

Signed at Barberton, in the county of Summit and State of Ohio, this 12 day of January, A. D. 1924.

HENRY A. RUDD.