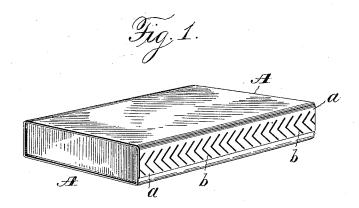
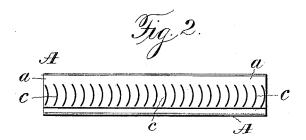
## J. K. ROBINSON. MATCH BOX.

(Application filed Sept. 5, 1899.)

(No Model.)





Okitnesses: Jaskesfutchinson. Henry C. Sazard

Forventor. John Ko. Robinson, by Orindle and Russell, his attip

## United States Patent Office.

JOHN K. ROBINSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE DIAMOND MATCH COMPANY, OF SAME PLACE.

## MATCH-BOX.

SPECIFICATION forming part of Letters Patent No. 649,358, dated May 8, 1900.

Application filed September 5, 1899. Serial No. 729,525. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. ROBINSON, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful Improvements in Match-Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

o Figure 1 is a perspective view of a box having upon its edge the form and arrangement of igniting-surface preferably employed, and Fig. 2 is a side view of a box having an alternative form and arrangement of igniting-sur-

face.

Letters of like name and kind refer to like

parts in each of the figures.

In the manufacture of boxes containing matches it has heretofore been customary to form upon one of the side edges of such box a strip of igniting material which extends centrally from end to end thereof and is for lighting matches.

The object of my invention is to produce a friction -surface upon match - boxes which shall possess greater efficiency than that described, shall involve less expense in its production by decreasing the weight of the box, shall lessen the cost of transportation, and which shall tend to prevent the match-head from leaving the side edge of the box in a lateral direction, but which shall tend to keep such match-head traveling in the direction of the length of said side edge so long as it is moved over its surface; and to such end my said invention consists in a match-box provided with an igniting-surface substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I provide upon one of the surfaces of a match-box A, preferably upon a side a, a series of sections of igniting material b and b, which sections have preferably the form of straight strips which incline from the edge of the box toward the center of its side a, and all or the majority of which strips incline toward the same end of such side, as shown in Fig. 1. The strips b and b thus form in effect a series of guiding-ridges which tend to defect the match-head toward the center of the

box, and thus tend to prevent the lateral escape of the match-head from the ignitingsurface during its travel in the general direction of the length of the same. The same effect is obtained by any series of strips of ig- 55 niting material, the greater number of which strips are bent or inclined at their central portions toward the same end of the box side. Preferably each of such strips extends entirely or nearly across the side a, and the se- 60 ries of strips extend from end to end of the same; but such dimensions are not essential and may be varied at will. As thus constructed the match-lighting side of the box is composed of a series of separate or detached 65 igniting-sections, over which the friction end of a match is successively drawn when it is desired to ignite the latter, such interrupted frictional contact between the match end and the igniting material being found to be more 70 effective than the continuous contact heretofor employed. In addition to such increased effectiveness the igniting-sections do not become as easily clogged and ineffective as will a continuous section or surface, while as the 75 amount of igniting material required is materially lessened a considerable saving in the cost of the box and in the cost of its transportation is effected.

While the form and arrangement of ignit-80 ing-surfaces shown in Fig. 1 is preferably employed, other forms and arrangements, such as the curved lines c, c, and c of igniting material illustrated in Fig. 2, may be used without departing from the spirit of my invention. 85

Having thus described my invention, what

1 claim is-

A match-box provided on one of its sides with a series of separated sections of igniting material, said sections consisting mainly of 90 lines having their middle sections bent in the same direction, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of

August, 1899.

JOHN K. ROBINSON.

Witnesses:
RALPH E. WIRT,
F. ARMBRUSTER.