

(No Model.)

H. CRAMER.
MATCH BOX.

No. 493,983.

Patented Mar. 21, 1893.

Fig. 1.

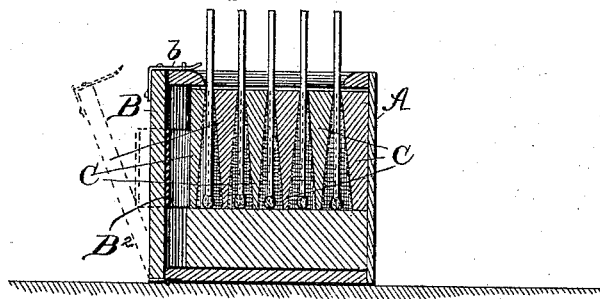


Fig. 2.

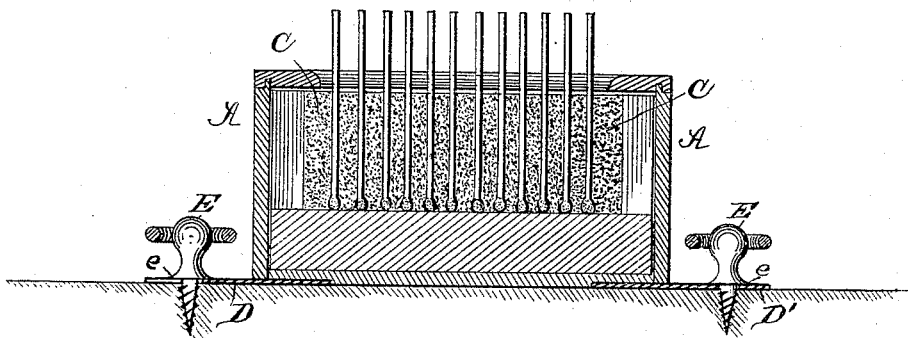
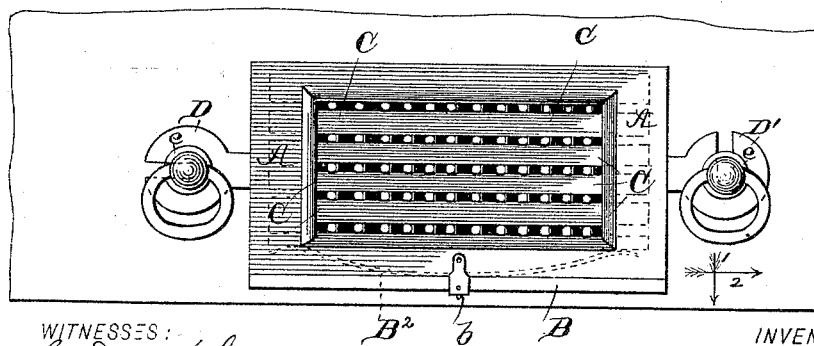


Fig. 3.



WITNESSES:
Fred G. Dietrich
Edw. H. Byrne

INVENTOR:
Howard Cramer
BY *Munn Lo*
ATTORNEYS

UNITED STATES PATENT OFFICE.

HOWARD CRAMER, OF NEWBERRY, PENNSYLVANIA.

MATCH-BOX.

SPECIFICATION forming part of Letters Patent No. 493,983, dated March 21, 1893.

Application filed August 2, 1892. Serial No. 441,907. (No model.)

To all whom it may concern:

Be it known that I, HOWARD CRAMER, of Newberry, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Match-Boxes, of which the following is a specification.

The object of my invention is to provide a match box which causes the match to ignite as it is withdrawn from the box.

In saloons and cigar stands it is a common practice for smokers to strike matches against the wall, or painted surface, thereby seriously soiling it with unsightly scratches and it is also a very common practice for the smoker upon obtaining his cigar to take along a handful of matches, which in the aggregate involves considerable loss to the dealer. My invention is designed to obviate both these difficulties, and to that end it is an improvement on that form of match box in which the matches are retained by their heads, and which are ignited upon being withdrawn without setting fire to any of the others as will be hereinafter fully described.

Figure 1 is a vertical transverse section of the box showing in dotted lines how spring pressure is applied to the retaining blocks by the closing of the door. Fig. 2 is a longitudinal section and Fig. 3 a plan view.

In the drawings A represents the box which is preferably made of cast iron nickel plated, but may be made of wood, hard rubber, papier maché, or any other suitable material. At one side of the box is a hinged door B provided with a catch *b* for holding it closed. In the top of the box is an opening through which the stems of the matches protrude in any number of rows. Within this box are arranged longitudinally in parallel position a set of two or more retaining blocks C. These blocks or bars are wedge shape in cross section, and their sides are covered with sand paper, or are sanded by the direct application of glue and sand, or are otherwise roughened. They may be made of wood, metal, porcelain, stone, or any other desired material. When these blocks are fitted together in the box they form alternate spaces which are larger at their bottom parts than they are at their tops, and between them are retained

in the larger and lower portion the heads of the matches, whose stems project upwardly in rows from between the retaining blocks and through the opening in the top of the box or case, so that they may be easily grasped. After the rows of matches are put in place between the retaining blocks, the whole series of blocks and alternating rows of matches are clamped together with an elastic pressure by means of a flat semi-elliptical spring B² which is pressed against and partially flattened by the door B in being closed. This causes the matches to be pinched between the retaining blocks, and when a match is pulled out its head, or larger end, rises between the retaining blocks into the narrower part of the space between the same, and the act of withdrawing it brings it with sufficient frictional contact against the sanded faces of the blocks to ignite it just as it leaves the blocks without igniting the other matches. As the blocks are all slightly yielding, by virtue of the spring pressure, the head is surely ignited without being pulled off.

To hold the box in place upon the counter, stand or table, so as to resist the strain of withdrawing a match, the bottom of the box is provided at its ends with two sheet metal plates D D', one of which, D, has a slot in its end, and the other D' in its side, and upon the counter or stand are screwed through these openings thumb screws E E' which have base flanges *e* that overlap and press upon the plate, so as to tightly hold the plates and the attached box down to its place. These same devices may serve also to attach the match box to the sides of the wall or other vertical surface. To remove the box it is only necessary to give the set screws a turn sufficient to relax the binding effect of their flanges, and the right angularly arranged slots in the plates then allow one end of the box to be swung sidewise, and then withdrawn longitudinally from the other set screw without removing or detaching said screws.

In defining my invention with greater clearness, I would state that I am aware that match boxes have been heretofore constructed in which the matches were retained by their heads between roughened spring pressed sur-

faces and were ignited by being pulled out. These constructions are not easily opened, and are troublesome to load. In my construction, with the door opening at the side of the
5 friction blocks and applying the tension of the spring simultaneously to all the blocks by the act of closing the door, the parts of the box are made easily and quickly accessible, and the spaces may be quickly and conven-
10 iently filled when empty.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A match box comprising a containing
15 case with an open top, a series of detachable

friction blocks arranged in parallel position therein, a door arranged at the side of the series of friction blocks, and a spring interposed between said door and the series of blocks substantially as shown and described. 20

2. A match box having at its opposite ends metal plates D D' with slots in the same arranged at right angles, and the flanged clamp screws E E' substantially as shown and described.

HOWARD CRAMER.

Witnesses:

HERMAN CLAUDIUS,
EDW. W. BYRN.