

(No Model.)

H. H. BAKER.

MANUFACTURE OF FRICTION MATCHES.

No. 255,095.

Patented Mar. 21, 1882.

Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Witnesses:
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MANUFACTURE OF FRICTION-MATCHES.

SPECIFICATION forming part of Letters Patent No. 255,095, dated March 21, 1882.

Application filed June 18, 1881. (No specimens.)

To all whom it may concern:

Be it known that I, HALSEY H. BAKER, a citizen of the United States, residing at Plainfield, in Union county, and State of New Jersey, have
5 invented a new and useful Improvement in the Manufacture of Friction-Matches; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to make
10 and use the same.

Heretofore matches have been made by dipping the end of a solid splint into sulphur, paraffine, or other inflammable matter, and subsequently tipping them with an explosive composition, which latter projects over and around
15 the end, enlarging its diameter, which renders it liable to explosion by friction in packing and transportation. To remedy this objection I construct the splint with a cavity in the end
20 to receive the explosive compound, whereby the latter is protected from friction against adjacent tips. A much smaller quantity of the explosive is required for each match, and the splint thus formed may be dipped in the
25 paraffine or other inflammable material, either before or after the application of the explosive compound.

Referring to the accompanying drawings, Figure 1 represents a longitudinal section of
30 a match-splint, showing the cavity for reception of the priming. Fig. 2 is a similar view with the priming added. Fig. 3 is a perspective view of the completed match. Fig. 4 is an end view of the same.

35 In the manufacture of my improved match I form a cavity, *a*, in the end of the stick or

splint *e*, which is then filled with a measured quantity of the explosive compound *c*, so as to protrude slightly beyond the end of the splint, and said end is then dipped in paraffine or any
40 suitable inflammable material. The noise of the explosion is reduced in proportion to the reduction in quantity of explosive used, and is further smothered by the chamber containing it, while the thin edges of the stick around the
45 explosive are more readily ignited than a solid splint, and by the composition being protected within the cavity I can dispense with the crocus metalarium and other ingredients used only to give body to the explosive, and which
50 cause the objectionable black mark left wherever a match has been struck.

A match thus constructed costs much less to manufacture, as it requires only one-fourth the usual quantity of explosive compound. It
55 is not liable to destruction by the explosive being knocked off, and the matches cannot stick together, as is commonly the case with what are known as "parlor-matches."

What I claim as new, and desire to secure 60 by Letters Patent, is—

1. The match-splint *e*, formed with the cavity *a* in its end for the reception of the explosive compound *c*, substantially as described.

2. A match having the explosive compound 65 inserted in a cavity in the end of the splint, as a new article of manufacture.

HALSEY H. BAKER.

Witnesses:

GEORGE P. SUYDAM,
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