

(No Model.)

H. L. BUXTON.
MATCH.

No. 554,651.

Patented Feb. 18, 1896.

Fig. 1.

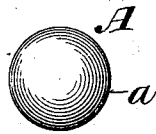
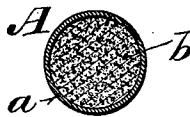


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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MATCH.

SPECIFICATION forming part of Letters Patent No. 554,651, dated February 18, 1896.

Application filed January 29, 1895. Serial No. 536,543. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. BUXTON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Matches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to provide a match a large number of which may be contained within a small compass suitable and convenient for pocket use, to economize material, and to avoid litter produced by the residuum or unburned portion of common matches.

It consists essentially of a body of a suitable combustible substance that will burn and supply a flame for the desired length of time, and of an envelope or coating of a substance ignitable by percussion or friction.

In the accompanying drawings, illustrating my improved match on a greatly-enlarged scale, Figure 1 is an exterior view or elevation, and Fig. 2 is a medial section.

The match designated A as a whole is made in approximately spherical or globular form, as shown, and for ordinary purposes may be from three thirty-seconds to three-sixteenths of an inch in diameter, although I do not wish to be understood as limiting myself to any particular size or to the exact shape above designated. It is composed of a body *b*, of some suitable slowly-combustible material that will take fire from the envelope or coating when it is ignited, and will sustain combustion and supply a flame for a sufficient length of time for the various purposes for which matches are or may be used, and of an envelope or coating *a*, of phosphorous composition or some quickly-burning substance that can be readily molded or applied to the body *b*, and can be easily ignited by friction or percussion, but which of itself will not supply a flame of sufficient duration.

I prefer to use for the body *b* wood reduced to a pulp or powder, and compressed or molded into the proper form for the filling *b*, either with or without adhesive material for stick-

ing and holding the particles of wood together. Any suitable oily or resinous and combustible substance may be used for a binder in forming the body *b*, which in the completed match is to be completely enveloped by the coating *a*, so as to insure its ignition in whatever position it may be held.

In the practical use of my improved match it should be understood that a suitable holder and lighter is to be provided for conveniently containing or carrying a number of matches and igniting and burning them one at a time; but I make no claim to such a device herein, but mention it simply to explain the method of using the match which constitutes the subject-matter of this application. In use these matches are almost completely consumed, and produce but a very small residue of light friable ash, which is inappreciable when scattered. Thus the objectionable litter or waste produced by the use of ordinary matches is avoided. Furthermore, a much greater supply of these matches can be contained in a given compass than of ordinary matches, and a great saving is effected in their manufacture by the use of wood pulp or powder in place of the sticks of ordinary matches which require large quantities of straight-grained timber, constituting an important, if not the chief, item of cost in their production.

I claim—

1. A globular match composed of a body of slowly-combustible material and of an envelope or coating of a quickly-burning substance completely surrounding it and easily ignitable by friction or percussion, the substance of the enveloped body being such as will take fire from the ignitable coating and supply a flame of the desired duration, substantially as and for the purposes set forth.

2. A globular match composed of a body of combustible material such as wood pulp or powder, completely enveloped or coated with a substance ignitable by friction, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY L. BUXTON.

Witnesses:

CHAS. L. GOSS,
M. L. EMERY.