(No Model.)

I. M. ROSE.

PERCUSSION TAPE.

No. 265,874. Patented Oct. 10, 1882.

fig. 1

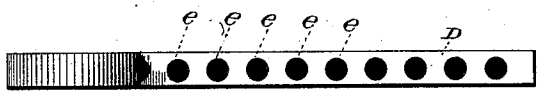


fig. 2

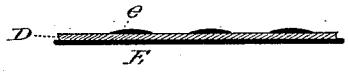
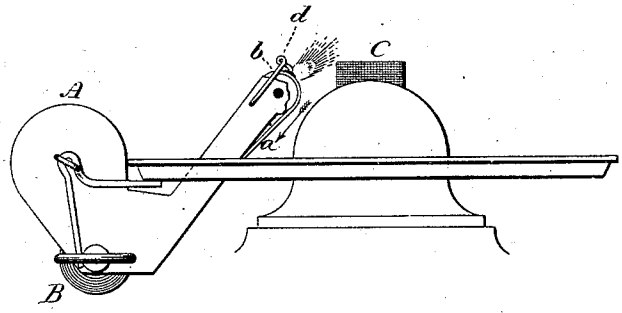


fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

ISRAEL M. ROSE, OF NORWALK, CONNECTICUT.

PERCUSSION-TAPE.

SPECIFICATION forming part of Letters Patent No. 265,874, dated October 10, 1882.

Application filed April 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL M. ROSE, of Norwalk, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Tapes for Lamp-Lighters; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view of the tape; Fig. 2, a longitudinal section, enlarged; and Fig. 3, the lighting apparatus to which the tape is particularly adapted.

This invention relates to an improvement in percussion-tapes for lamp-lighters and similar purposes, with special reference to the lighter for which Letters Patent were granted to this applicant and known as the "Rose Lighter."

In the usual construction of percussion-tapes the pellets are arranged upon a strip of paper, their surface usually covered by a thin strip, so as to require a blow to produce explosion. In my apparatus, which is fitted for attachment directly to the burner, explosion is produced by friction, as seen in Fig. 3, *a* representing the tape, the coils placed in the drum A, the tape passed up over a pulley, *b*, thence down to the winding-spool B, the pulley *b* being near the wick C of the burner. At that point a wire prong, *d*, or other device rides upon the surface of the tape, so as to scratch the pellets as they are presented, and by such scratching produce explosion or ignition of the pellet, the fire from which is communicated to the wick, or whatever the burner may be.

In the use of my apparatus the tape is moved by drawing upon the end which has passed the firing-point. The strain therefore upon the tape to produce the frictional firing is very great, and frequently breaks the common tape. Because of the usual covering applied to the pellets, that covering must be torn before contact is had with the pellets, and in tearing that surface and subsequent firing of the pellets there is liability to burn the paper.

The object of my invention is to overcome these difficulties and construct a strong tape which shall present the surface of the pellets directly to the firing device; and it consists in a tape formed from woven fabric, with or without a backing of paper, and having explosive pellets successively arranged on the fabric surface, as more fully hereinafter described.

D is a strip of woven fabric, either cut or woven to the required width for the tape, and to prevent stretching of the tape a backing, E, of paper is applied thereto by some adhesive material, or otherwise, to cause the paper to adhere to the woven fabric. On the surface of the fabric the pellets *e* are arranged and secured by any adhesive material between the pellets and the fabric, or by applying the pellets in a pasty adhesive condition directly to the surface of the tape. When the pellets are dry the strip is ready for use.

Because of the employment of the woven fabric for the tape, sufficient strength is given to prevent the possibility of breaking the tape. Again, the application of the pellets upon the surface of the tape, leaving them exposed, makes ignition by friction easier than when covered in the usual manner. The backing of paper applied to the woven tape prevents its stretching, making it equally as rigid as a paper tape.

I claim—

1. The herein-described improvement in tapes for lamp-lighters, consisting of the strip of woven fabric D, having the percussion-pellets *e e* arranged upon its surface and exposed without covering, substantially as described.

2. The herein-described improvement in tapes for lamp-lighters, consisting of the strip of woven fabric D, having the percussion-pellets *e e* arranged upon its surface and exposed without covering, the opposite side of the tape having a backing of paper, E, secured thereto, substantially as described.

I. M. ROSE.

Witnesses:
BENJ. J. STURGES,
JARVIS KELLOGG.