No. 642,727. Patented Feb. 6, 1900.

J. O. SMITH.

TAPE LINE REEL.

(Application filed June 26, 1899.)

(No Model.)

Fig. 1.

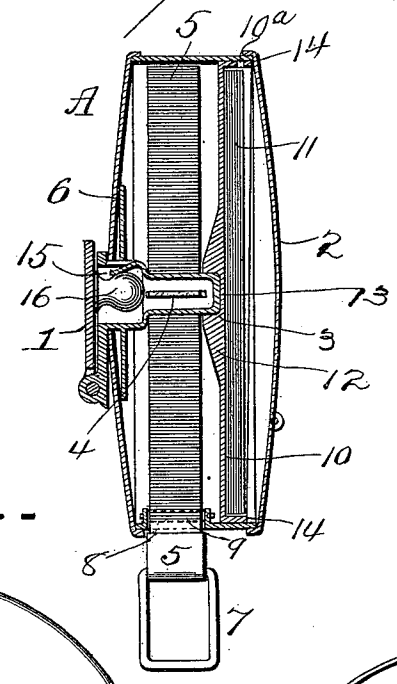


Fig. 2.

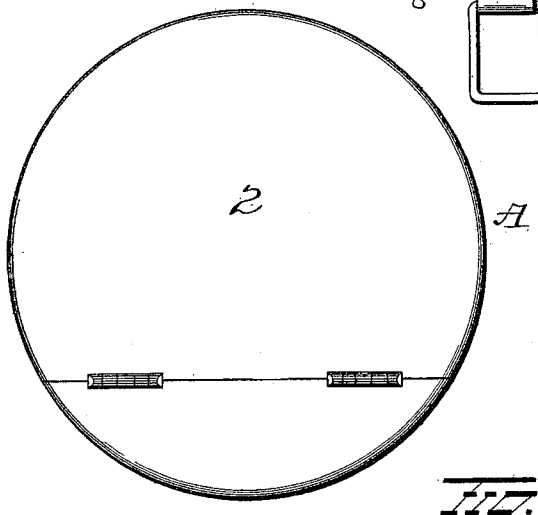


Fig. 4.

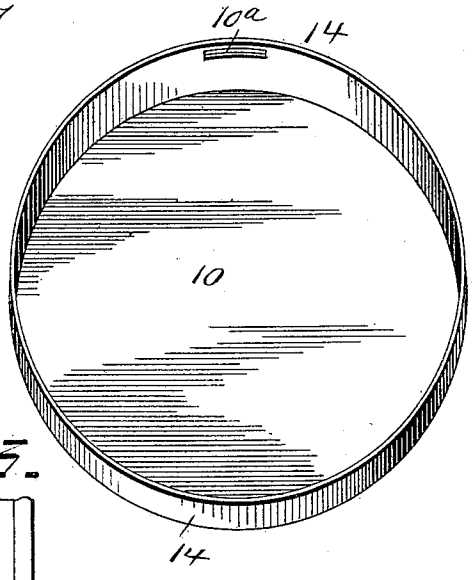


Fig. 3.

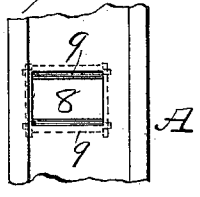
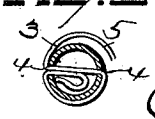


Fig. 5.



WITNESSES

E. D. Nottingham

G. F. Downing.

INVENTOR

J. O. Smith

By H. A. Seymour

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN O. SMITH, OF DENVER, COLORADO.

TAPE-LINE REEL.

SPECIFICATION forming part of Letters Patent No. 642,727, dated February 6, 1900.

Application filed June 26, 1899. Serial No. 721,958. (No model.)

To all whom it may concern:

Be it known that I, JOHN O. SMITH, of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Tape-Line Reels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in tape-line reels, the object of the invention being to provide a tape-line reel which shall be simple in construction, comparatively cheap to manufacture, which shall be so constructed and arranged that access to its interior may be easily and quickly effected, and which shall be effectual in all respects in the performance of its functions.

With this object in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a sectional view of my improved tape-line reel. Fig. 2 is a bottom plan view of the same. Fig. 3 is a side view showing the opening through which the tape passes; and Figs. 4 and 5 are detached views of the partition and shaft, respectively.

A represents a reel-casing closed at one end and provided at its opposite end with a hinged door 2. Formed integral with one end of a hinged handle 1 is a hollow shaft 3, preferably closed at one end and provided at suitable points between its juncture with said handle and its closed end with one or more horizontal slots 4 for the attachment of one end of tape 5 to the shaft, the end of the tape being passed through the slots and disposed within said hollow shaft. The shaft 3 is mounted in a bearing centrally located in the closed end of casing A and is revolubly supported therein and against endwise and lateral movement by a disk or washer 6, rigidly secured to said shaft and adapted to move in contact with the inner face of said closed end of the casing. The shaft is prevented from displacement inwardly by means of an integral flange or handle 1, which moves in contact with the outer surface of the closed end of the casing.

One end of tape 5 is secured to shaft 3, as above explained, and the ring end 7 thereof normally rests on the outside of casing A and adjacent to the side walls of slot 8, formed in the side thereof. The tape when unwound or wound passes through said slot and in contact with the rollers 9 9, located within the interior of said casing and adjacent to the side walls of slot 6, said rollers acting as guides for the tape and preventing the latter from coming in contact with the sharp side walls of said slot.

The interior of casing A is divided into two compartments by a partition 10, the compartment adjacent to the closed top of the casing being for the reception of shaft 3 and its attached tape, while the other compartment next to hinged door 2 is adapted to receive and support a writing-pad, loose sheets of paper, or other writing material 11. The partition 10 is provided on one of its faces with a raised portion 12, having a depressed seat 13, in which the closed end of shaft 3 has its bearing. The partition is further provided with an upturned peripheral flange 14, inclined from front to rear, for the purpose of enabling said partition to be easily and quickly inserted under the hinged end of door 2 and the part of the casing to which said door is hinged. The outer surface of this flange 14 rests in contact with a portion of the inner surface of the side wall of casing A and tends to prevent partition 10 from wabbling. The removal of partition 10 may be easily and quickly effected when desired by inserting a suitable device into a slot 10^a, formed in a convenient part of flange 14, and pulling in an upward direction thereon.

When the reel is not in use, the swing-section of handle 2 is normally locked against its hinged member by means of a spring-tongue 15 engaging the knob 16 of said handle. This tongue 15 is struck up from the side wall of hollow shaft 3 and is adapted to impinge against the side face of knob 16 of said swinging section of handle 2 and firmly hold the same against accidental movement.

From the foregoing it will be seen that a simple, durable, and efficient tape-line reel is provided, one in which provision is made for transcribing measurements and other data, and one in which all the parts confined therein are accessible from the outside, thus render-

ing it possible for the user to renew or repair damaged parts, and at the same time making it possible to remove dents or repair damage to the casing arising from rough usage.

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

1. The combination with a casing closed at one end and having a hinged cover or door at the other end, a removable partition disposed within said casing and dividing the same into two compartments, a shaft mounted at one end in the closed end of the casing and at the other end in said removable partition and a tape-line wound on said shaft and passing through the peripheral wall of the casing.

2. The combination with a casing closed at one end and provided at the other end with a hinged cover, of a removable partition within said casing, said partition having a peripheral flange to lie against the inner wall of the casing and constructed to receive a device to permit the ready removal of the partition, a shaft having its respective bearings in the closed end of the casing and said removable partition, and a tape wound on said shaft and passing through a slot in the casing.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN O. SMITH.

Witnesses:

MANUAL M. JONES,

JAMES R. NIXON.