

No. 621,857.

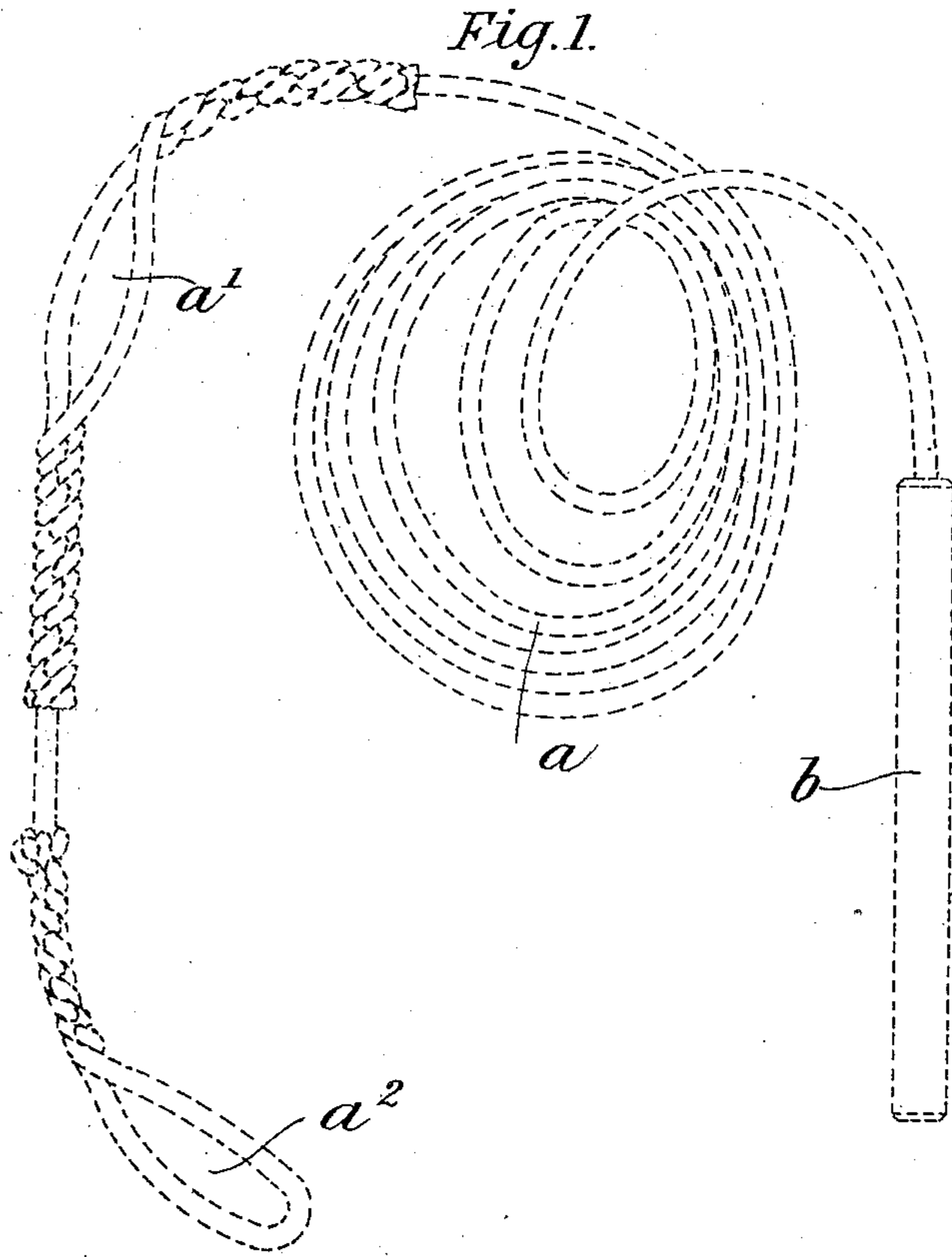
Patented Mar. 28, 1899.

D. SCOTT.  
DEVICE FOR CLEANING GUN BARRELS.

(Application filed July 16, 1898.)

(No Model.)

3 Sheets—Sheet 1.



WITNESSES:  
*Geo. J. J. J.*  
*M. H. W. W.*

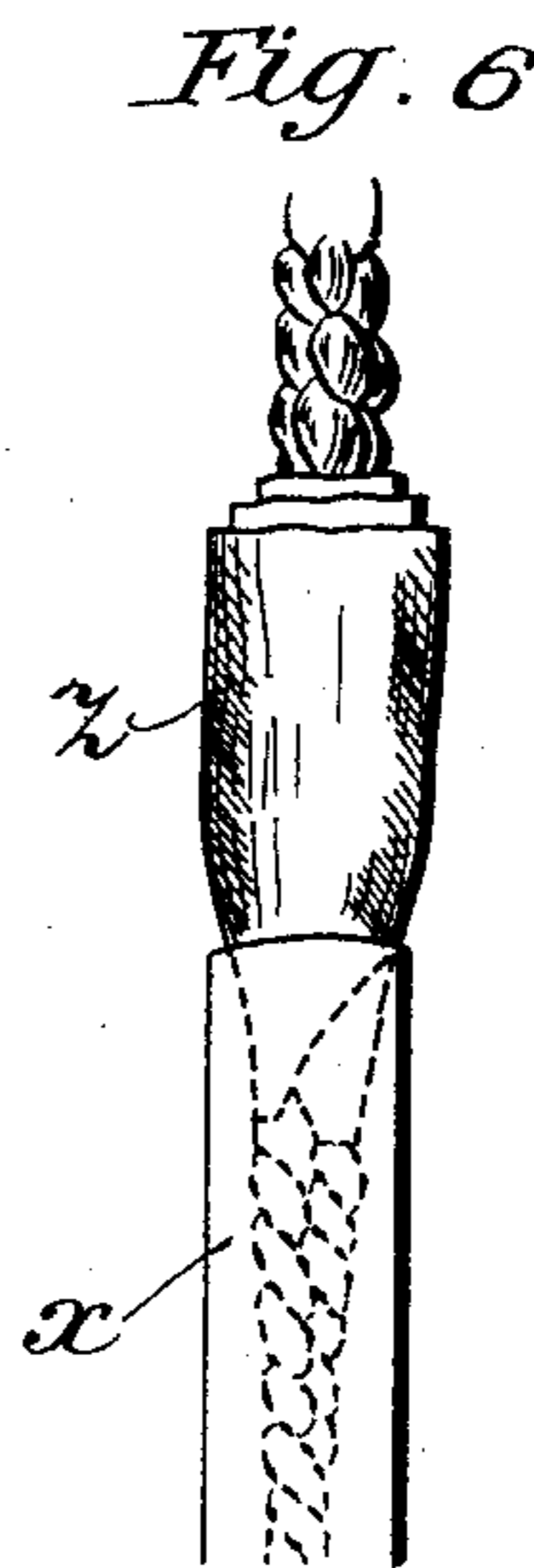
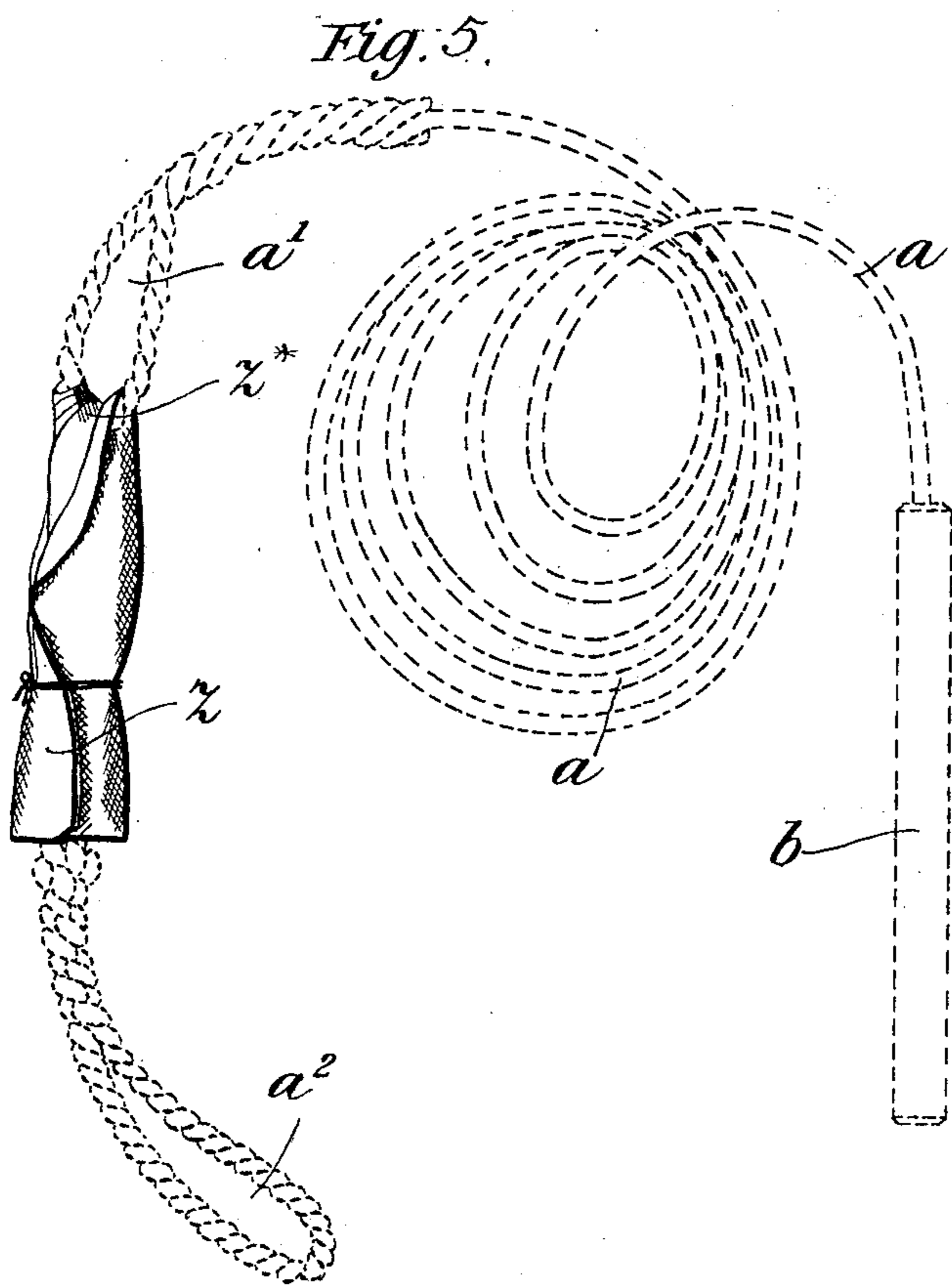
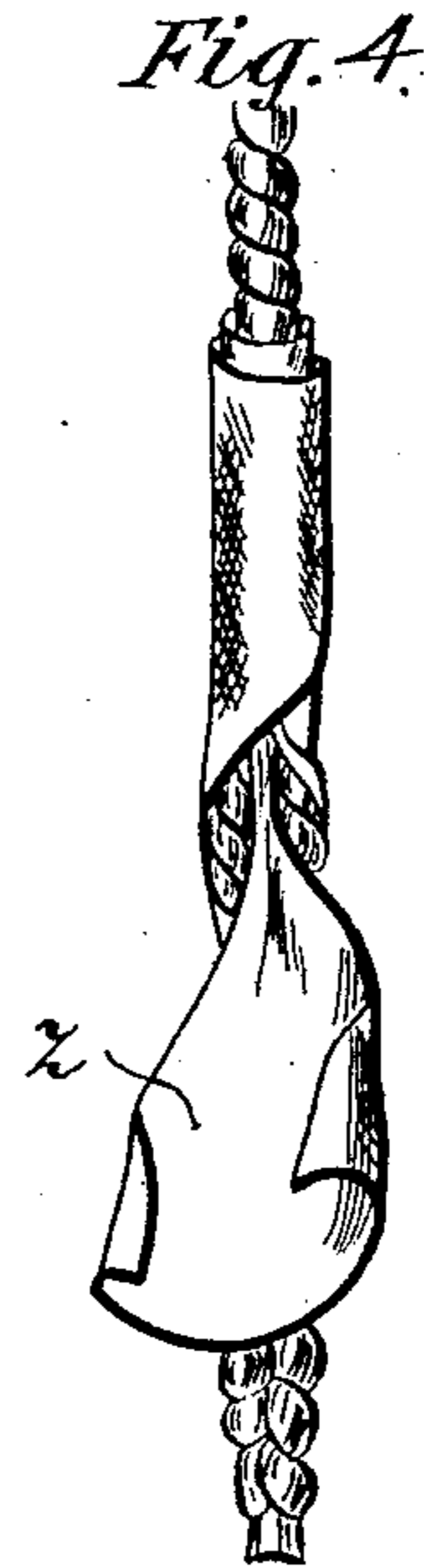
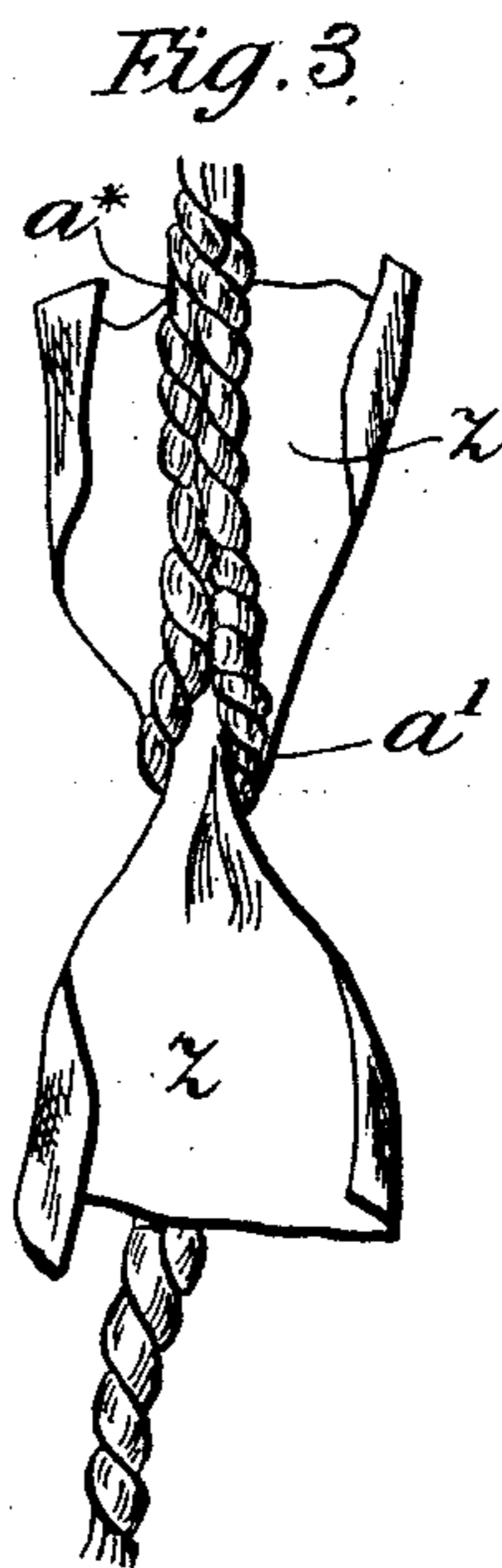
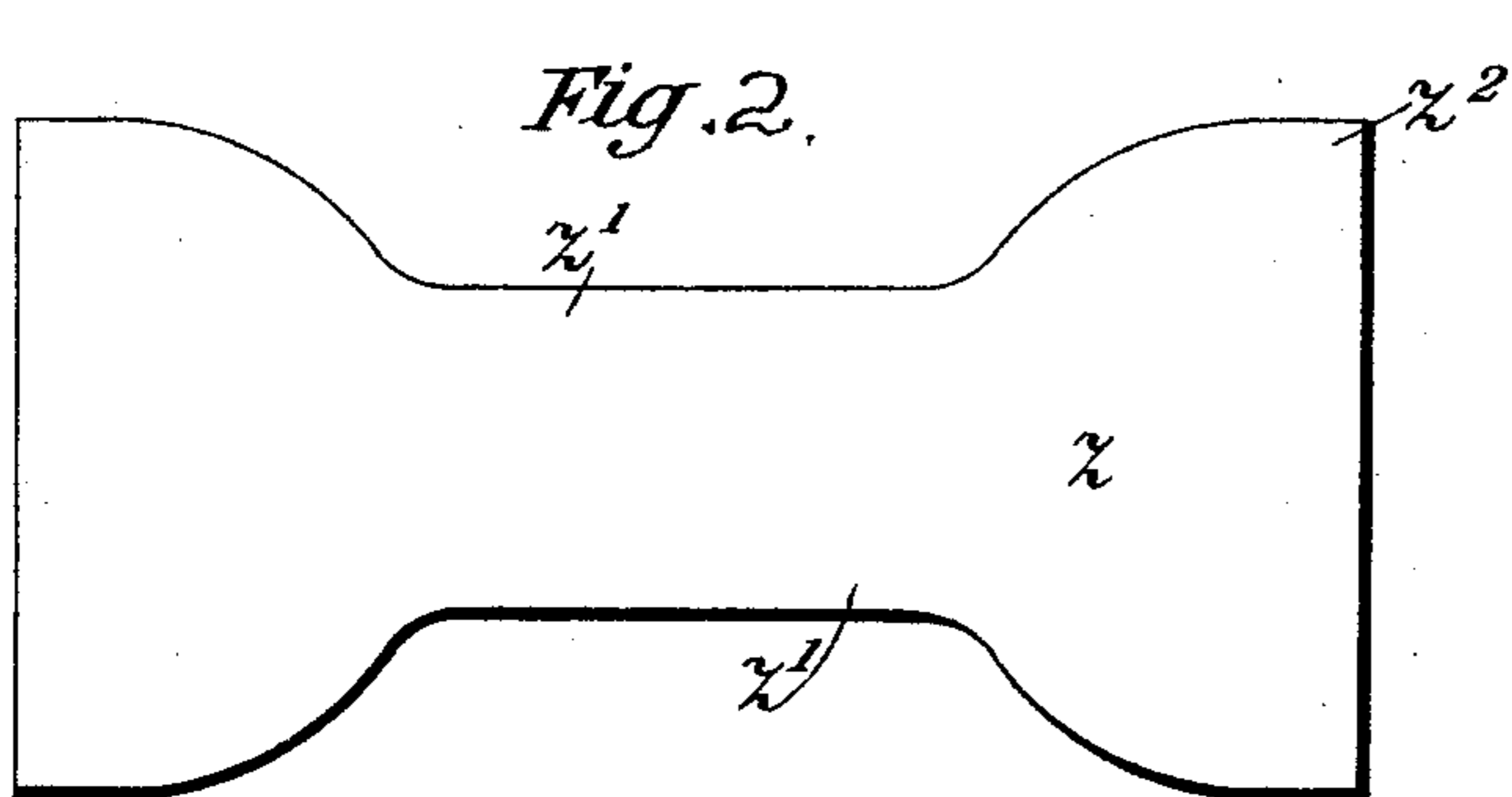
INVENTOR  
*Dugald Scott*  
By *Joseph P. P.*  
ATTORNEYS.

D. SCOTT.  
DEVICE FOR CLEANING GUN BARRELS.

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(No Model.)

3 Sheets—Sheet 2.



WITNESSES:

*Geo. Jaeschke*  
*Wm. H. Wurtzel*

INVENTOR

*Dugald Scott*  
BY *Gregory & Regener*  
ATTORNEYS.

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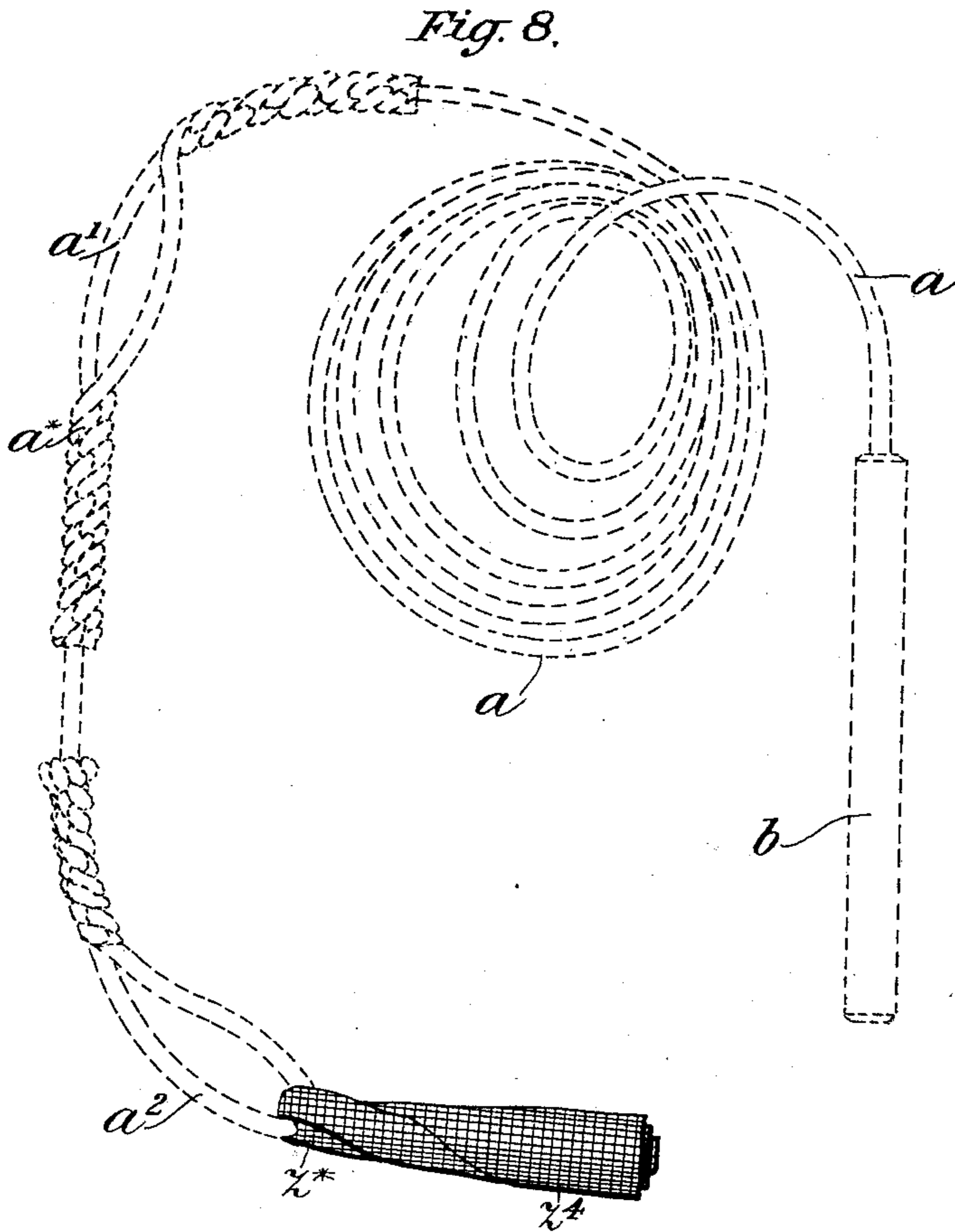
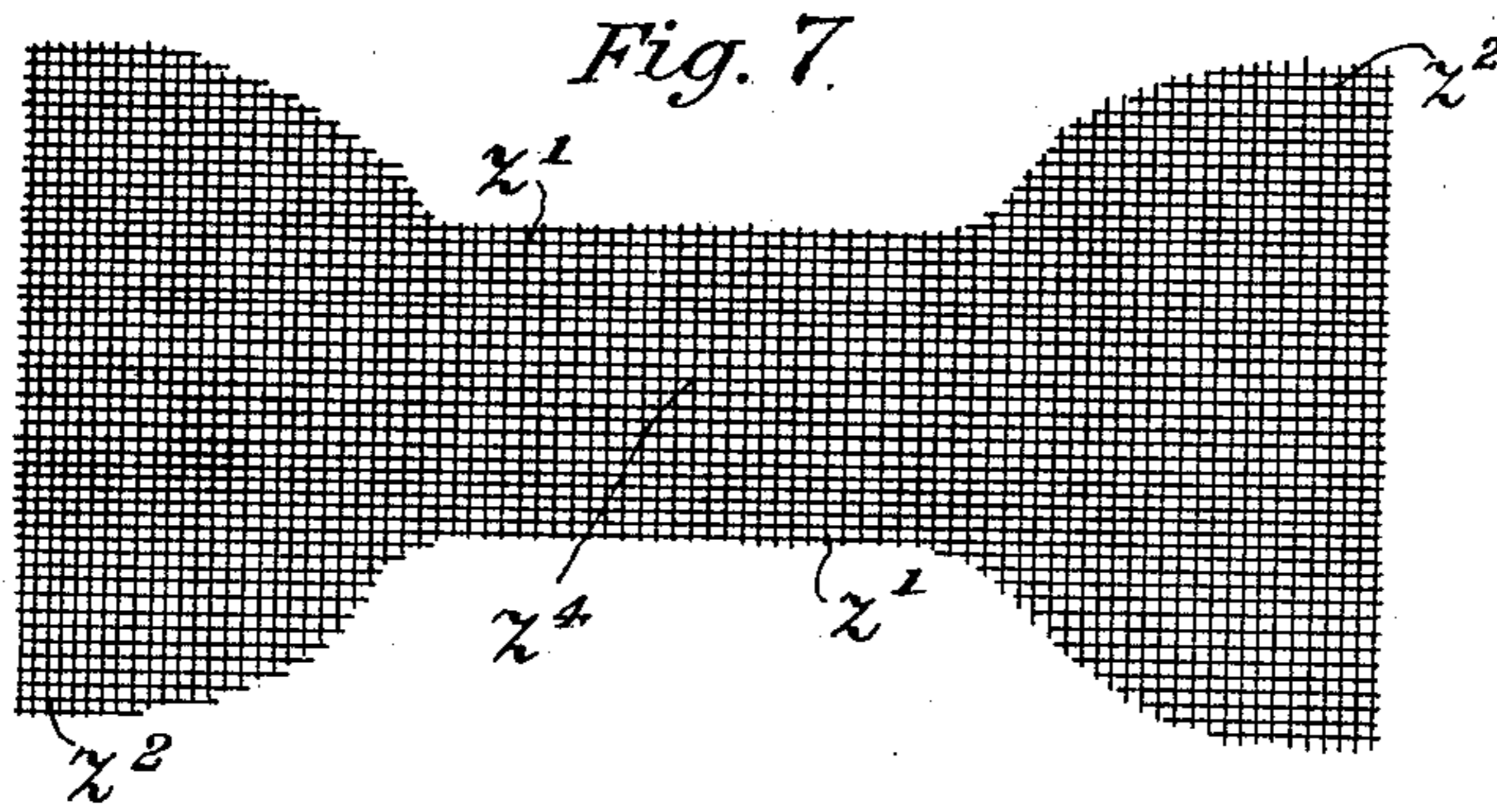
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(No Model.)

3 Sheets—Sheet 3.



WITNESSES:

*Scott Jaesel*  
*M. H. Wintzel*

INVENTOR

*Dugald Scott*  
BY *Joseph P. Prager*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

DUGALD SCOTT, OF MANCHESTER, ENGLAND, ASSIGNOR TO JONES BROTHERS & CO., OF SAME PLACE.

## DEVICE FOR CLEANING GUN-BARRELS.

SPECIFICATION forming part of Letters Patent No. 621,857, dated March 28, 1899.

Application filed July 16, 1898. Serial No. 686,099. (No model.)

*To all whom it may concern:*

Be it known that I, DUGALD SCOTT, manufacturer, a subject of the Queen of Great Britain, residing at 12 York street, Manchester, in the county of Lancaster, England, have invented certain new and useful Improvements in or Relating to Devices or Means for Cleaning Small-Bore Rifle-Barrels, of which the following is a specification.

This invention relates to improvements in devices or means for cleaning small-bore rifle-barrels; and the object of the same is to provide means for easily and thoroughly cleaning the bores of rifle-barrels or other tubular parts which need cleaning; and the invention consists of a device for cleaning the interior of rifle-barrels, which comprises a flexible cord provided with a loop and a piece of cleaning material whose longitudinal sides are so cut away as that after the strip has been passed through the loop of the cord and wrapped around said cord it assumes a cylindrical form operative as a cleaning-surface along the whole or the greater part of the length thereof.

Referring to the accompanying drawings, Figure 1 illustrates means heretofore well known for cleaning rifle-barrels. Figs. 2 to 8 illustrate the present invention.

For cleaning the barrels of small-bore rifles, particularly army-rifles, there has already been used a device consisting of a piece of string or cord or equivalent  $a$  with a loop or loops  $a^1$   $a^2$  at one end and with a weight  $b$  at the other end, (see Fig. 1,) said weight  $b$  being of a size adapted to pass readily through the rifle-barrel, so as to draw the string  $a$  therethrough. A piece of rectangular fabric of suitable material is usually inserted in one of the loops; but in such case practically all the cleaning work is done by the front part of the fabric, where it is bunched up at such front part, as it is drawn through the barrel  $x$ , the two ends trailing behind loosely and practically uselessly, inasmuch as they do no work toward cleaning the barrel.

The present invention consists as follows: The same device as or a similar device to Fig. 1 is used according to the present invention, which consists in so forming and arrang-

ing the piece or pieces of fabric or material (by which the cleaning operation or operations are performed) of a special shape, as shown in Fig. 2, whereby a very effective cleaning action is obtained on the interior of the barrel as follows: The fabric or material (which may advantageously be an unbleached cotton-velvet or may be flannelette or wire-gauze or other suitable material) is formed, stamped, or cut, as shown in Fig. 2, with the middle portion thereof, at  $z'$ , narrower than the ends  $z^2$ , so that when this piece of fabric  $z$  of special form, as shown in Fig. 2, is threaded through the loop  $a'$ , as shown in Fig. 3, in said string  $a$  the one end thereof is first wrapped around the thickened part  $a^x$  (see Fig. 3) of the string  $a$ , as shown in Fig. 4, and then the other end of the piece of fabric  $z$  (see Fig. 4) is wrapped closely around the first-named end, (and tied with a string  $z^3$ , if desired,) the part  $a^x$  of the string  $a$ , Fig. 3, serving as a core for this piece of fabric  $z$ , which thus forms an even or cylinder-like shape, as shown in Fig. 5, the bunch or front portion  $z^x$ , Fig. 5, of the folded fabric as it goes through the barrel  $x$ , Fig. 6, being of less bulk than the rear cylindrical part, and consequently the piece of fabric  $z$  bears against the interior of the barrel  $x$  along a greater part of its length than in the old arrangement, and consequently a very effective cleaning action is obtained.

In Fig. 7 the cleaning material  $z^4$  illustrated is made of thin sheet wire-gauze of the same shape as Fig. 2, this wire-gauze being passed through the end loop  $a^2$  in the cord  $a$ , and first one end is closely rolled up and then the second end closely rolled around the first-named end, as shown in Fig. 8, the front portion  $z^x$  of this arrangement (see Fig. 8) being of less bulk than the rear portion, as hereinbefore described with reference to Fig. 5, the said rear portion being of a cylindrical or even shape, as before described with reference to Fig. 5, the object of the arrangement shown in Fig. 8 being for cleaning or clearing the interior of rifle-barrels which are badly clogged or in such a state that the cleaner made of textile fabric, as shown in Figs. 2 to 6, will not be strong enough to clean same, so

that after first using the cleaner arrangement shown in Figs. 7 and 8 the cleaner shown in Figs. 2 to 6 can then be used to finish the cleaning operation, or, if desired, the wire-gauze arrangement shown in Fig. 8 and the textile-fabric arrangement shown in Fig. 5 may both be used on one and the same cord  $a$ , or, where not necessary, the use of the wire-gauze  $z^4$  would be dispensed with. A more or less uniformly cylindrical cleaner-surface is thus provided with a conoidal point  $z^x$ , which is obtained by the hollowing-out of the middle of the shaped piece, as shown in Figs. 2 to 7. In forming this specially-shaped cleaner  $z$  or  $z^4$  for the purpose aforesaid according to the present they are stamped out of the material in the piece in such wise that the portions cut out to form the narrowed middle part  $z'$  of each cleaner  $z$  or  $z^4$  form the enlarged end parts  $z^2$  of the adjacent cleaners, so that there is no waste or practically no waste in cutting these specially-shaped cleaning devices out of a length of cloth or material, and by means of suitable hollow cutters or dies of the shape of the cleaner, as shown in Figs. 2 to 7, a number of thicknesses of the fabric or material can be cut through at each stamping operation.

If desired, these specially-shaped "cleaners" may be prepared for sale and use with oil or grease or other suitable preparation.

What I claim is—

1. A device for cleaning the interior of rifle-barrels, the same consisting of the combination with a flexible cord provided with a loop, of a piece of cleaning material whose longitudinal sides are recessed or cut away so that after the strip has been passed through the loop and wrapped around said cord, it assumes a cylindrical form operative as a cleaning-sur-

face along the whole or the greater part of the length thereof, substantially as set forth.

2. A device for cleaning the interior of rifle-barrels consisting of the combination with a flexible cord  $a$  provided with a loop  $a^2$  therein at one end and a weight  $b$  at the other, of a piece of wire-gauze specially shaped with the ends wider than the narrowed-out middle portion thereof and adapted when passed through said loop  $a^2$  to have the ends rolled up one within the other and thereby form a more or less uniformly cylindrical cleaner-surface with a conoidal end of less bulk than said cylindrical portion substantially as and for the purposes described.

3. A device for cleaning the interior of rifle-barrels consisting of the combination with a flexible cord  $a$  provided with two loops  $a'$  and  $a^2$  at one end thereof and a weight  $b$  at the other end thereof, of a piece of textile fabric specially shaped with the ends wider than the narrowed-out middle portion thereof and adapted when passed through said loop  $a'$  to have the ends folded around said string and thereby form a more or less uniformly cylindrical cleaner-surface with a conoidal end of less bulk than said cylindrical portion and a piece of wire-gauze specially shaped with the ends wider than the narrowed-out middle portion thereof and adapted when passed through said loop  $a^2$  to have the ends rolled up one within the other and thereby form a more or less uniformly cylindrical cleaner-surface with a conoidal end of less bulk than said cylindrical portion substantially as and for the purposes described.

DUGALD SCOTT.

Witnesses:

JOHN W. THOMAS,  
ERNALD S. MOSELEY.