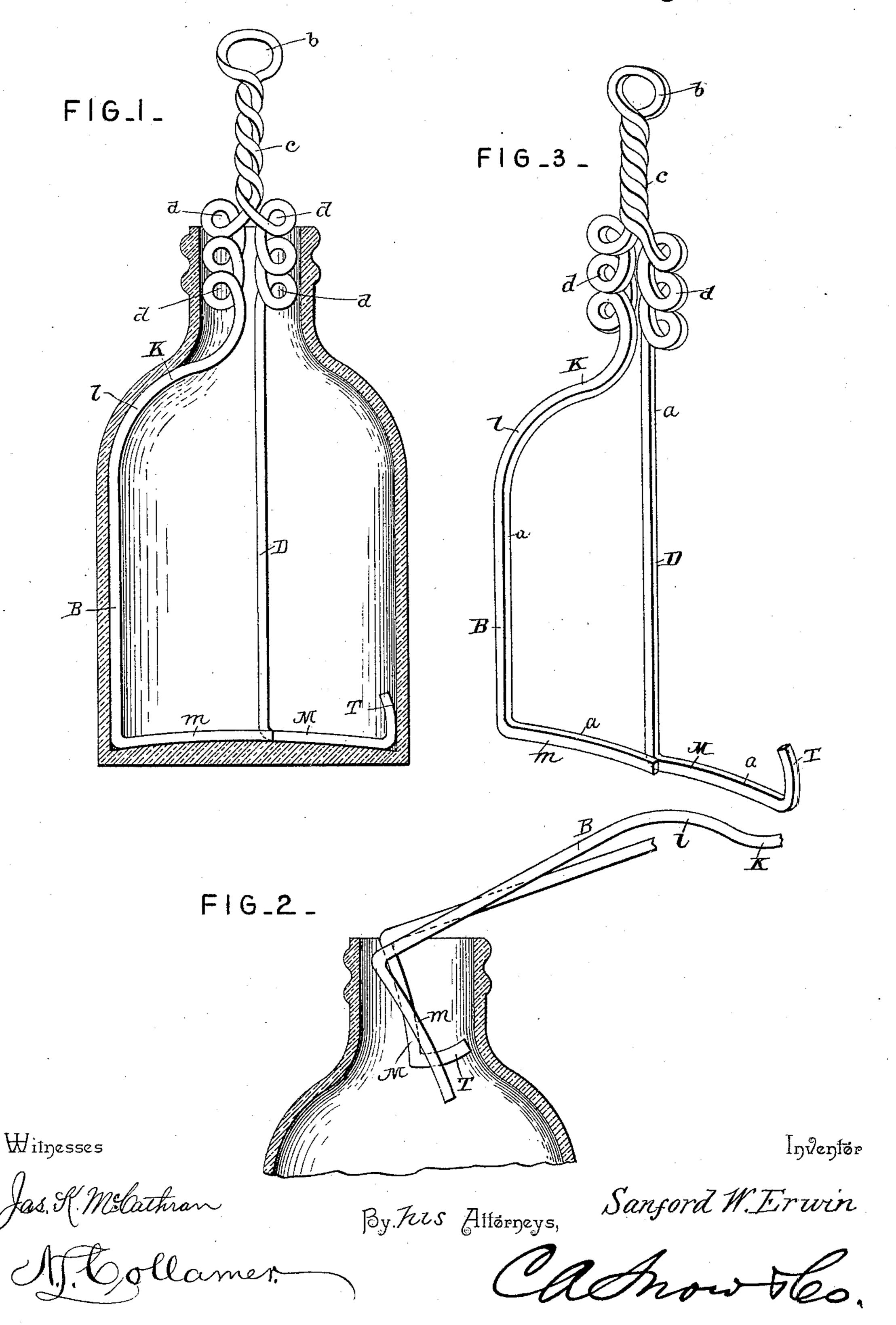
(No Model.)

S. W. ERWIN. CLEANER FOR FRUIT JARS, &c.

No. 434,982.

Patented Aug. 26, 1890.



United States Patent Office.

SANFORD W. ERWIN, OF MOUNT MERIDIAN, INDIANA.

CLEANER FOR FRUIT-JARS, &c.

SPECIFICATION forming part of Letters Patent No. 434,982, dated August 26, 1890.

Application filed April 24, 1890. Serial No. 349, 374. (No model.)

To all whom it may concern:

Be it known that I, Sanford W. Erwin, a citizen of the United States, residing at Mount Meridian, in the county of Putnam and State of Indiana, have invented a new and useful Cleaner for Fruit-Jars, &c., of which the following is a specification.

This invention relates to devices for removing splinters or slivers which adhere to glass jars and other hollow glass articles as they come from the factory; and it consists in the specific construction of parts, as hereinafter more fully described, and as illustrated in the drawings, in which—

Figure 1 is an elevation of this device, showing it as applied to a narrow-necked vessel. Fig. 2 is a similar view showing the manner in which it is inserted therein. Fig. 3 is a perspective view of the cleaner.

The present invention is an improvement on a device of a similar nature patented to me November 19, 1889 by United States Letters Patent No. 415,625, to which reference is made in this connection. It has been found in the use of the said patented device that many bottles and fruit-jars have mouths so small in size that the device illustrated in said patent cannot be conveniently inserted therein, and in order to make the present device capable of that use I construct it in substantially the following manner.

I provide a length of spring metal, which may be made rectangular in cross-section, so that it will have angular edges a. At its center this bar is bent into a loop, forming a handle b, below which the branches of the bar are twisted to form a shank c. Below the shank the branches may be formed into loop-spirals d, all as shown and described in the former patent above referred to.

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In order to provide for cleaning the i

In order to provide for cleaning the inside wall of the vessel, one branch below the lowermost loop-spiral is bent outwardly to form a shoulder K, which is continued downwardly in a rounded curve l, below which it extends straight down, as at B, to its terminal portion, which is bent inwardly and slightly upwardly, as shown at m, thereby forming a cleaning-arm for the bottom of the vessel, all as in the former patent; but

the other branch is continued straight down from the lowermost loop-spiral, as at D, to its terminal portion, where it is bent outwardly, and its tip T is bent upwardly parallel to the part D, thereby forming an- 55 other cleaning arm M for the bottom of the vessel. The two branches of the instrument stand in planes slightly different from each other—that is to say, alongside each other—and the instrument can be intro-60 duced into the vessel by simply pressing the two lower ends of the branches toward each other, when they will approximately register, as shown in Fig. 2, and the arms m and M can be introduced into the mouth of the 65 vessel in this position, passed downwardly therein, turned so as to stand across the vessel, and then released and allowed to spring into their proper position, when the tip T will brace the device in the vessel, all as will 70 be clearly understood.

This device is useful for cleaning larger vessels as well, its employment in that case being the same as formerly. The elasticity of the branches also allows the instrument 75 to be easily withdrawn from the vessel.

I claim as the salient features of this invention—

1. The instrument for detaching splinters from the interior of glass vessels, provided 80 with the upper end loop, a shank below the loop, and branches below said shank, one of the branches bending outwardly and then downwardly, and at its lower end bending inwardly to conform to the shape of the interior of the vessel, and the other of said branches extending straight down from said shank and then bending outwardly, substantially as set forth.

2. The instrument for detaching splinters 90 from the interior of glass vessels, provided with the upper end loop, a shank below the loop, and branches below said shank, one of the branches bending outwardly and then downwardly, and at its lower end bending 95 inwardly to conform to the shape of the interior of the vessel, and the other of said branches extending straight down from said shank and then bending outwardly and upwardly at its tip, substantially as set forth.

3. The herein-described bottle-cleaner, the same consisting of a single piece of spring metal bent at its center into a handle, the branches thereof below said handle being approximately L-shaped, and one of them being bent outwardly to conform to the shape of the interior of the vessel, as specified.

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

SANFORD W. ERWIN.

Witnesses:

JOHN S. GRIMES, LOYD E. KNIGHT.