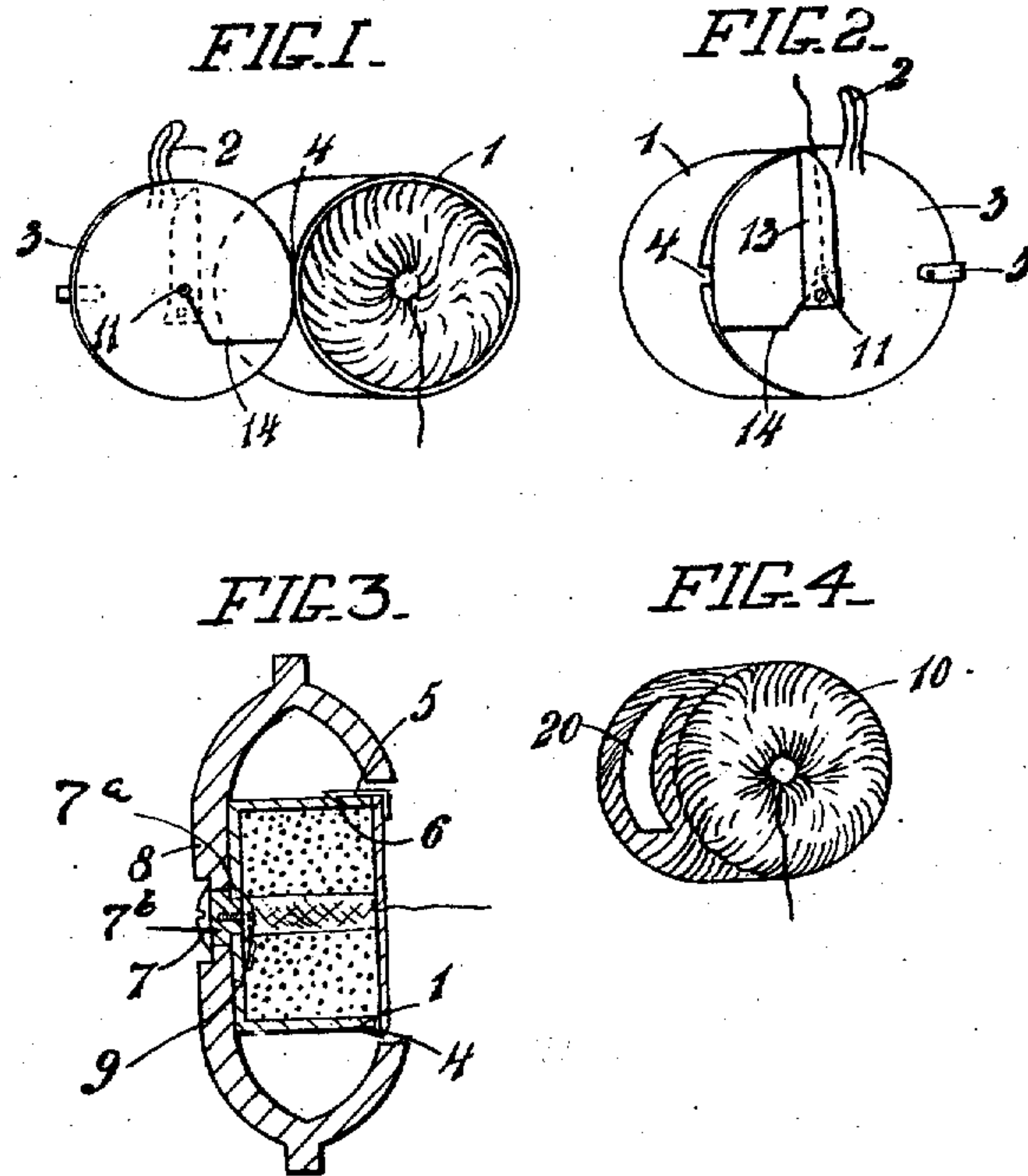


A. G. R. WILLIAMS.
SEWING MACHINE SHUTTLE.
APPLICATION FILED APR. 18, 1908.

932,929.

Patented Aug. 31, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR GEORGE RICH WILLIAMS, OF PETONE, NEW ZEALAND.

SEWING-MACHINE SHUTTLE.

932,929.

Specification of Letters Patent. Patented Aug. 31, 1909.

Application filed April 18, 1906. Serial No. 312,439.

To all whom it may concern:

Be it known that I, ARTHUR GEORGE RICH WILLIAMS, a subject of His Majesty the King of Great Britain and Ireland, residing at Petone, in the provincial district of Wellington, in the Colony of New Zealand, have invented certain new and useful Improvements Relating to Sewing-Machine Shuttles, of which the following is a specification.

The invention relates to sewing machines and its object is to dispense with the cotton carrying spool usually employed in the shuttle and also to dispense with the employment of a reel for carrying cotton upon the upper part of the machine.

According hereto the cotton or the like for employment in the machine is wound in what I term a "cop," the cop being approximately the shape of the interior of the shuttle of the machine upon which it is to be used. The outer end of the cotton is made thoroughly secure by attaching it by paste or the like to a label or otherwise while the inner end is left free for unwinding. The cop requires no spool, mandrel, or other contrivance to assist its unwinding and prevent knotting as when wound in the manner indicated and unwound from the inside there is no tendency to knot.

The drawings illustrate the invention.

Figure 1 is a perspective elevation of a circular cop case with its lid open and with a cop of cotton in position. Fig. 2 is a similar view showing the lid closed. Fig. 3 a sectional elevation, of a shuttle with its bobbin case and cop in position. Fig. 4 a perspective view of a circular cop.

Referring to the drawing, the circular cop case 1 is similar to the bobbin case used upon the well known Singer and similar makes of sewing machines and has the usual latch 2 to keep the case from revolving. To

the case 1 I attach a lid 3 by a hinge 4 and secure the lid in its closed position by a spring catch 5 which takes into a recess 6 45 formed in the case. The usual pin upon which a bobbin is placed is dispensed with and I make a square hole through the back of the case 1 to receive the sided part 7^a of a stud 7 which has, beyond the sided part 50 7^a, a circular part 7^b passing through a circular hole in the shuttle 8 and the said stud is provided with a screw 9 for retaining the case 1 on the said stud. The shuttle is thus 55 capable of revolving in the usual race while the case 1 is held from revolving by the latch 2. The circular cop 10 fits the case 1 and the cotton is drawn from the center of the cop, through a hole 11 in the lid 3 and beneath the usual spring tension 13 from 60 which it passes to be engaged by the upper cotton of the machine in the usual way. A slit 14 is made from the edge of the lid to the hole 11 for facility of passing the cotton into the hole. 65

What I do claim and desire to secure by Letters Patent of the United States is:—

In a sewing machine, the combination with a shuttle, of a case for holding a cop, a hinged lid having a slot and a hole at the 70 end of the slot, a spring catch upon the lid adapted to engage a recess formed in the case, a latch upon the lid, a stud in the shuttle upon which the case is located, and a screw passing into the stud and retaining 75 the case within the shuttle, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

ARTHUR GEORGE RICH WILLIAMS.

Witnesses:

I. WATSON,

JAMES A. HARDIE.