

(No Model.)

C. B. HUNT.
SEWING MACHINE.

No. 474,663.

Patented May 10, 1892.

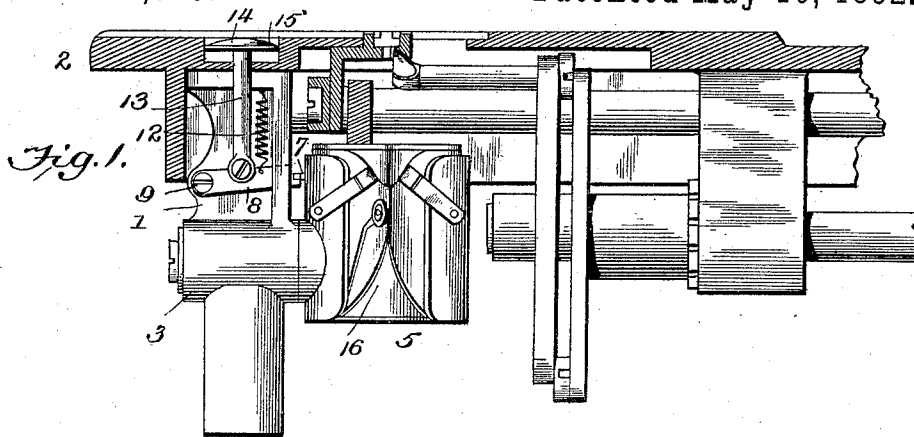


Fig. 2.

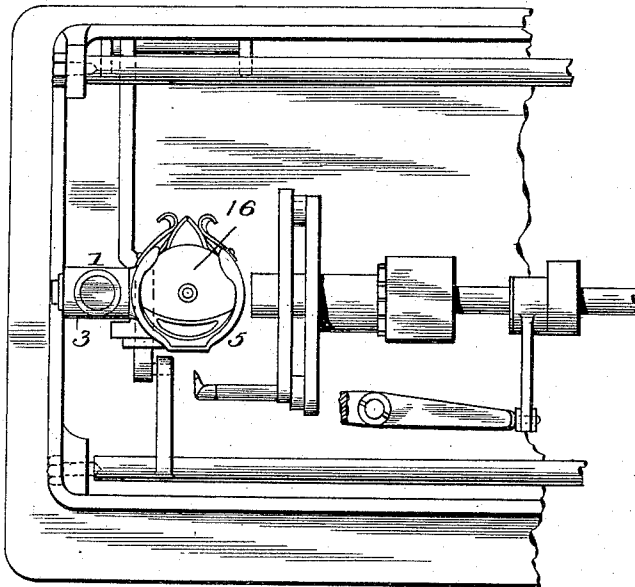
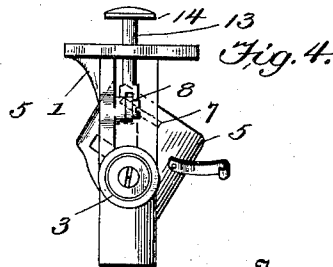
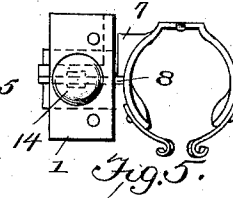
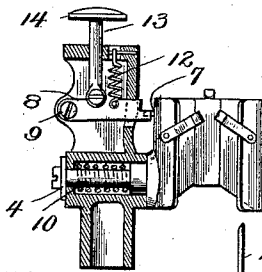
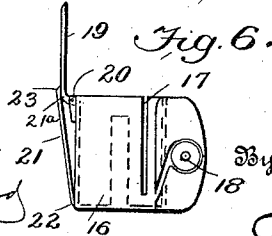


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES BRANSTON HUNT, OF LONDON, ENGLAND.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 474,663, dated May 10, 1892.

Application filed June 12, 1891. Serial No. 396,031. (No model.) Patented in England August 18, 1890, No. 12,959; in France January 6, 1891, No. 210,601; in Belgium January 8, 1891, No. 93,367; in Germany January 16, 1891, No. 60,930; in Italy January 28, 1891, XXV, 29,012, and LVII, 61, and in Austria-Hungary May 18, 1891, No. 4,544 and No. 16,860.

To all whom it may concern:

Be it known that I, CHARLES BRANSTON HUNT, a subject of the Queen of Great Britain, residing at 59 Holborn Viaduct, London, England, have invented certain new and useful Improvements in Sewing-Machines, (for which I have obtained Letters Patent in Great Britain, No. 12,959, dated August 18, 1890; in France, No. 210,601, dated January 6, 1891; in Belgium, No. 93,367, dated January 8, 1891; in Germany, dated January 16, 1891, No. 60,930; in Italy, Vol. XXV, No. 29,012, and Vol. LVII, No. 61, dated January 28, 1891, and in Austria-Hungary, No. 4,544 and No. 16,860, dated May 18, 1891,) of which the following is a full, clear, and exact specification.

This invention relates to that type of sewing-machines having an under-reel case for carrying a thread, which co-operates with the needle-thread in forming stitches; and the invention has for its object to provide novel means for supporting the reel-case, whereby the latter can be conveniently and quickly removed and replaced.

To accomplish this object, my invention involves the features of construction and combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a detail vertical sectional elevation of sufficient of a sewing-machine to illustrate my invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detail vertical sectional view of the bracket or hanger which supports the reel-case carrier. Fig. 4 is a side elevation of the same, showing the reel-case carrier swung to one side for the purpose of removing the reel-case. Fig. 5 is a top plan view showing the reel-case carrier located in its upright position, and Fig. 6 is a detail side elevation of the reel-case.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a bracket rigidly attached to and depending from the underside of the bed-plate 2 of a sewing-machine, hav-

ing stitch-forming mechanism of any construction suitable for the conditions required. The particular stitch-forming mechanism illustrated in the drawings constitutes the subject-matter of my application for Letters Patent filed February 10, 1892, Serial No. 420,973, and therefore I do not deem it essential to describe the same in detail. The pendent bracket 1 is constructed with a transverse horizontally-arranged journal-bearing 3 to receive a horizontal journal or spindle 4, secured to or formed with a reel-case carrier 5, which in its normal position of use stands perpendicular and is suitably constructed to receive and support a removable and replaceable reel-case 16. The reel-case carrier is provided at its exterior with a laterally-projecting lug or shoulder 7, which projects toward the pendent bracket 1 for the purpose of engaging a movable dog 8, carried by the pendent bracket and adapted to move into and out of the path of the said lug or shoulder. As here illustrated, the dog 8 is pivoted at one extremity to the pendent bracket, as at 9, and its opposite extremity is adapted to engage and disengage the lug or shoulder 7. The journal-bearing 3 contains a spiral spring 10, secured at one end to the journal or spindle 4 and at the opposite end to the journal-bearing in such manner that when the dog 8 is moved out of engagement with the lug or shoulder 7 the resiliency of the spring serves to rotate the journal or spindle 4, and thereby swing the reel-case carrier 5 from its perpendicular position, Figs. 3 and 5, to a laterally-inclined position, as in Fig. 4, so that the upper end of the reel-case carrier is presented to the usual opening formed in the work-plate and covered by the ordinary slide. The dog 8 is acted upon by a spring 12, which tends to lift the dog into such position as to engage the lug or shoulder 7, and for the purpose of depressing the dog out of engagement with such lug or projection I provide a vertically-movable pin 13, having at its upper end a suitable finger-piece 14, located in a recess in the bed-plate 2, as illustrated in Fig. 1, in such manner that when the reel-case carrier is perpendicular, as in operating position, and

the dog 8 engages the lug or shoulder 7, the finger-piece 14 can be pressed downward for the purpose of disengaging the dog from the lug or shoulder and permitting the spring 10 to swing the reel-case carrier laterally into the position exhibited by Fig. 4, so that the reel-case can be conveniently and quickly removed and replaced through the usual opening in the work-plate. The reel-case for the under reel is composed of a cylindrical shell 16, adapted to pass into and out of the reel-case-carrier. The shell is provided with a slot 17 for the passage of the thread, which is afterward wound round a roller 18, journaled in a recess in the shell for tension purposes. The shell comprising the reel-case is provided at one end with a lid or cover 19, hinged or pivoted to the shell, as at 20, and provided with a rounded portion 21^a in proximity to its pivoted point. The side of the shell is provided with a leaf-spring 21, rigidly secured at one end to the shell, as at 22, and having its free end portion 23 bearing against the rounded portion 21^a of the pivoted lid or cover 19 in such manner that when the latter stands in its open position, as in Fig. 6, the spring serves to hold it in this position, and when the lid or cover is closed the spring also serves to hold it in its closed position.

30 Having thus described my invention, what I claim is—

1. The combination, with a pendent bracket 1, of a reel-case carrier pivoted to the bracket and provided with a lateral lug or shoulder 7, a spring acting to swing the reel-case carrier on its pivot, a dog 8, pivoted to the pendent bracket and movable into and out of the path

of the lug or shoulder on the reel-case carrier, a spring acting on the dog to move it into the path of the lug or shoulder, and a vertically-movable pin 13, acting on the dog and provided with a finger-piece 14, substantially as described.

2. The combination, with a pendent bracket 1, having a journal-bearing 3 and a pivoted dog 8, of a reel-case carrier having a lug or shoulder 7 and a journal or spindle 4, arranged in the journal-bearing, a spring acting on the journal or spindle to axially rotate the same, and a finger-piece for operating the dog to move it out of engagement with the lug or shoulder on the reel-case carrier, substantially as described.

3. The combination, with a reel-case carrier, of a reel-case for the under reel, composed of a cylindrical shell 16, fitting the reel-case carrier and provided with a thread-slot 17, a tension-roller 18, a pivoted lid 19, provided with a rounded portion 21^a in proximity to its pivoted point, and a leaf-spring 21, rigidly secured at one end to the cylindrical shell and having its free end portion bearing against the rounded portion of the pivoted lid to hold the latter open or closed, substantially as described.

In witness whereof I have hereto signed my name, in the presence of two subscribing witnesses, this 2d day of January, 1891.

CHARLES BRANSTON HUNT.

Witnesses:

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Both of 166 Fleet Street, London, England.