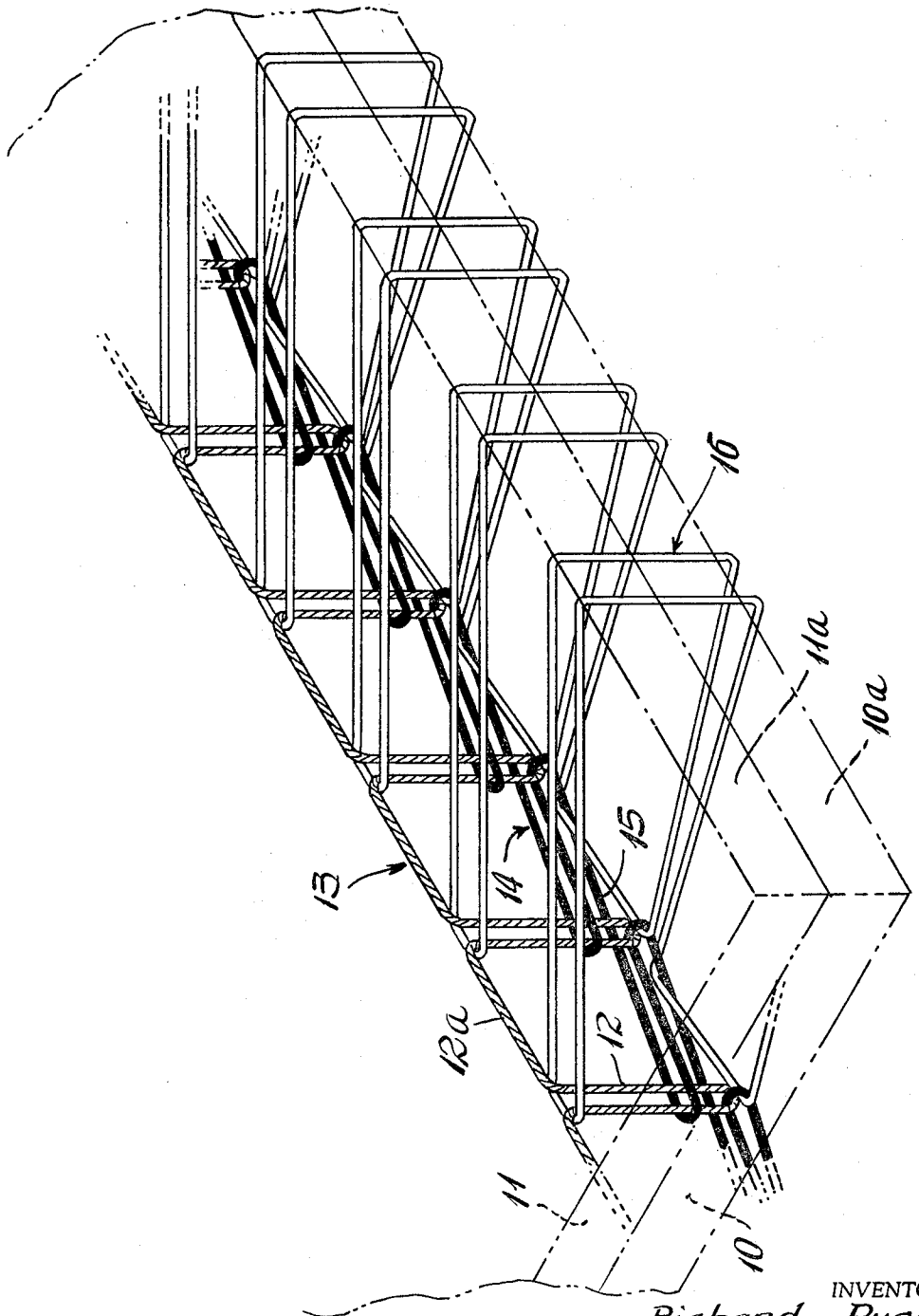
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SINGLE NEEDLE, THREE-THREAD EDGE STITCH

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INVENTOR.
Richard Russell
BY
Johnson and Kline
ATTORNEYS

United States Patent Office

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SINGLE NEEDLE, THREE-THREAD EDGE STITCH

Richard Russell, Tappan, N.Y., assignor to Willcox & Gibbs Sewing Machine Company, New York, N.Y., a corporation of New York

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ABSTRACT OF THE DISCLOSURE

The stitch comprises a row of loops of needle thread passing through the fabric adjacent an edge thereof and having a looper thread disposed below the fabric interlocked and interlaced with the needle thread to form a tight and secure stitch, and a cover thread, independent of the securing stitch, extending over the edge of the fabric and interlocked with the needle thread on the upper side of the fabric and with the loops of the looper thread.

Heretofore in making a stitch for the present purpose it usually required a plurality of needles resulting in multiple piercing of the facric, a larger number of threads, and was subject to raveling or opening of the seam, where so employed, when the stitch was severed or when the cover thread was inadvertently severed.

The present invention provides a novel stitch which has particular use in securing together and covering the edges of superposed layers of fabric to form a cover and which requires but a single needle to produce a tight and secure stitch for holding the fabrics together and also provides a cover thread for the edge which is independent of the securing stitch so that if the cover thread is accidently severed it will not cause the stitch to loosen or release its secure hold on the fabric enabling the fabrics to separate and produce a "grin" at the seam. Further, the interlock of the cover threads with the needle and looper threads prevents separation of the cover threads therefrom when severed. In addition the interlock between these threads tends to prevent raveling of the securing stitch when a cut is made through the stitch as when the seam it cut.

This novel sitch is formed by providing a single needle thread which is passed in a row of loops through the superposed layers of fabric in a predetermined line located in spaced relation with the superposed edges thereof, and by interlocking and interfacing a looper thread with the loops of the needle thread on the underside of the fabric and form a tight and secure stitch for locking the layers tightly together. A cover thread which is independent of the securing stitch is interlocked with the needle threads at the upper surface of the fabric, extends over the fabric and around the edges and is interlocked with the loops of the looper threads. This produces a tight stitch having the desired cover and which securely holds the fabric together with substantially no "grin" and holds the cover thread even though the cover thread is accidentally severed.

A feature of the invention resides in the high resistance to unraveling when the stitch and seam are severed.

Another feature of the invention resides in the fact that the stitch, since it uses only one needle, reduces the amount of piercing of the fabric heretofore required with its tendency to weaken the same.

A further feature of the invention resides in the fact that only three threads are required to tightly secure the fabric together and cover the edges of the fabric so that there is a saving in cost of these materials.

A still further feature of the invention resides in the simplicity of the stitch which does not require complicated mechanisms to produce the same.

Other features and advantages of the invention will be apparent from the specification and claims when considered in connection with the accompanying drawing which shows a diagrammatic perspective view of the stitch of the present invention applied to the edges of superposed layers of fabric to form a covered seam.

To illustrate the present invention the novel stitch is applied to secure together a plurality of layers of fabric **10**, **11** having their edges **10***a*, **11***a* in superposed alignment and comprises a row of spaced loops **12** of needle thread **13**, which loops are joined by thread portions **12***a*. The loops **12** pierce and extend through the superposed layers of fabric at a predetermined distance inward from said edges **10***a*, **11***a* with the portion **12***a* engaging the upper surface of the fabric. A looper thread **14** is formed into loops **15** and is interlaced and interlocked with the loops **12** and engages the undersurface of the fabric, as shown in the drawing, to so connect the loops **12** as to form a tight switch securely locking the layers of fabric together to provide a seam which has substantially no "grin" or separation when the fabric is under tension.

To provide a cover for the raw edges of the fabric, the stitch of the present invention provides a cover thread **16** which, as shown in the drawing, is interlocked with the needle thread on the upper side of the fabric by passing around the loop **12** and under the portions **12***a*. The cover thread is carried over the top of the fabric, around the edge and over the bottom fabric to interlock with the loops **15** of the looper thread **14** by passing through adjacent loops **15** thereof. With this arrangement it will be seen that the cover thread is securely held in place and provides an adequate cover for the edges of the fabric.

An advantage of this novel stitch construction resides in the fact that the cover thread is, in effect, independent of the securing stitch so that if the covering thread is cut, it will not change the holding action of the securing stitch. Also, the cover thread will not unravel since these threads are securely held in place by their interlock with the needle thread and looper thread. Further, this interlock between the cover thread and looper thread tends to resist unraveling of the securing stitch should all of the threads be severed as an incident to the severing of the seam.

While the stitch has particular use in seaming a plurality of fabrics, it is to be understood that the stitch, because of its many advantages, can be used for an effective serging operating on a single piece of fabric.

The novel stitch, whether used for seaming or serging, is strong, simple, economical, and efficient and can be made without the requirement of complicated mechanisms.

I claim:

1. A single needle cover stitch for covering an edge of a fabric layer comprising a row of interconnected loops of needle thread passing through the said fabric adjacent to the edge thereof, a looper thread disposed below the fabric and forming a plurality of loops which are interlocked and interlaced with said needle thread loops passing through the fabric, and a cover thread extending over said edge and having a portion overlying the top of the fabric layer and passing around said loops of needle thread and underlying the needle thread interconnecting said needle thread loops, said cover thread having a portion extending over the undersurface of the fabric layer and passing around the interlaced loop of looper thread and interlocked with the adjacent interlocking loop of the looper thread.

2. A single needle cover stitch for securing superposed edges of layers of fabric together to form a covered seam comprising a row of loops of needle thread passing through the said superposed layers of fabric adjacent the

edge thereof with the upper ends of said loops connected by an interconnecting portion of needle thread, a looper thread disposed below the fabric and forming a plurality of loops which are interlocked and interlaced with said needle thread loops passing through the fabric, and a cover thread extending over the edges and having a portion overlying the top of the fabric layer and passing around said loops of needle thread and underlying the needle thread interconnecting said needle thread loops, said cover thread having a portion extending over the undersurface of the fabric layer and passing around the interlaced loop of looper thread and interlocked with the adjacent interlocking loop of the looper thread.

3. The invention as defined in claim 2 wherein the portions of the cover thread are so interlocked with the needle thread and with the interlaced and interlocked loop of looper thread as to provide a means for resisting unraveling of the stitch when the stitch is severed.

4. The invention as defined in claim 2 wherein the portions of the cover thread are so interlocked with the needle thread and the interlaced and interlocked loops

of the looper thread as to provide means for maintaining the cover thread against unraveling and separation from the stitch in the event the cover thread is severed.

5. The invention as defined in claim 2 wherein the needle thread and cooperating looper thread cooperate to form a tight securing stitch independently of the cover threads associated therewith.

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RICHARD J. SCANLAN, JR., *Primary Examiner.*

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