Machines of Class 7, described in this leaflet, are especially adapted for use in the manufacture of sails, tarpaulins, awnings, tents, wagon covers, etc. They make an exceptionally strong lock stitch and are the most satisfactory machines procurable for sewing all descriptions of medium and heavy weight fabrics and canvas. Their durable construction enables them to withstand hard usage and makes them efficient and reliable under all conditions. Although built for heavy service, they require a minimum amount of power and are economical in operation.

The machines are made in several styles, being furnished with one or two needles and different fittings, as described on the following pages, to meet the varying stitching requirements of canvas work.
Speed

The machines herein mentioned are capable of maintaining higher speeds than any other flat bed, lock stitch machines designed for heavy canvas work. According to the individual descriptions given on the following pages, the machines can be driven up to speeds ranging from 500 to 650 stitches per minute, depending upon the length of stitch and class of material being sewn.

Alternating Pressers

Some machines of Class 7 have the well-known alternating presser feet which are very successful on canvas work. These alternating pressers consist of two separate presser feet, one of which assists the drop feed in carrying the work forward for each stitch, while the other foot alternately rises and descends to hold the work. In this way several plies of fabric can be perfectly fed through the machine at one time, and uniformity in the feeding of fabrics having rough or uneven surfaces is also assured.

Independent Upper and Lower Feeds

Machines of Class 7, which are fitted with this style of feeding mechanism, are especially suitable for work where it is necessary to have two or more plies of fabric come out even at the end of a seam, as in joining pieces of material of equal lengths. The feeding is accomplished by means of upper and lower feeds consisting of a feeding foot and drop feed, either of which can be independently adjusted to feed the upper or under plies of fabric faster or slower as desired.

Large Bobbins

Large size bobbins of great thread capacity are used in the machines. This is particularly an advantage when making long seams with coarse thread, as the stitching can be continued with fewer stops on account of empty bobbins.

Automatic Bobbin Winder

The large bobbins used in Machines of Class 7 are quickly filled with thread by the new type of automatic bobbin winders with which these machines are fitted. The bobbin winder is conveniently located at the front of the machine as shown in the illustration on the first page, and bobbins can be wound while the machine is stitching, thereby saving much of the operator's time.
Clear Working Space

Large work is easily handled on these machines, there being a clear working space of 15\(\frac{3}{8}\) inches at the right of the needle bar.

Adjustable Work Guide

To assist the operator in guiding the work, an adjustable guide is furnished with each machine.

The Singer Driving Attachment

Some Machines of Class 7, herein described, are equipped with the Singer Driving Attachment as shown in the illustration on page 4. This attachment enables the operator to instantly start or stop the machine as desired, the speed of the machine being entirely controlled by the amount of pressure on the treadle.

Foot Lifter

This device enables the operator to raise the presser foot of the machine by means of a foot lever, leaving the hands free to manipulate the work and thus aiding in the accomplishment of a large output.

Belt Shifter

The belt shifter used on Machines of Class 7, fitted with tight and loose pulleys, is found very convenient to operate. It consists of two belt guides or shifting fork mounted upon a slide. As the belt passes between the belt guides, it is readily shifted from the tight pulley to the loose pulley or vice versa, for starting or stopping the machine, a handle being provided, as shown in the illustration on page 7, for instantly moving the slide to the desired position.

When desired, the belt shifter can be controlled by means of a foot lever. In this case, pressure on the foot lever moves the belt shifter and belt to the tight pulley, thereby starting the machine, and when the foot lever is released, a spring moves the belt shifter and belt to the loose pulley, thus stopping the machine.
One Needle Machines of Class 7

Machine 7-31 on Table 29707 and Pressed Steel Stand 126616 Equipped with the Singer Driving Attachment Belted for Upper Drive

**Machine 7-31** is equipped with the Singer Driving Attachment as shown above. It has two alternating presser feet capable of a lift of $\frac{3}{8}$ inch, and can be fitted with a drop feed on one or both sides of the needle, as ordered. It makes stitches varying from $\frac{1}{8}$ to $\frac{1}{2}$ inch in length and has a 4 inch high point long beak shuttle. Speed 550 stitches per minute, according to the material being sewn.

**Machine 7-33** is the same as Machine 7-31, with the exception that it has no Singer Driving Attachment. It is fitted with small balance wheel 58411 for Singer Underdriver for mechanical power, or balance wheel 58249 for foot power stand as shown on page 5. Orders should state whether the machine is to be driven by mechanical power or foot power.
One Needle Machines of Class 7—Continued

Machine 7-33 on Table 5201 and Foot Power Stand 25207

Machines of Class 7, intended for operation by foot power, are easy to drive when set up on the rotary treadle stand illustrated above. The ingenious arrangement of the pedals and the heavy two speed driving wheel of this stand enable the operator to keep the machine up to speed with a minimum of effort.

Machine 7-41 is the same as Machine 7-31 with the exception that it has no Singer Driving Attachment, being equipped with tight and loose pulleys and a convenient form of belt shifter.

Machine 7-48 is also equipped with tight and loose pulleys and a belt shifter. It has alternating pressers and a drop feed and makes stitches varying from $\frac{3}{16}$ to $\frac{1}{64}$ inch in length. Speed 650 stitches per minute, according to the material being sewn.
Two Needle Machines of Class 7

Machine 7-27 (two needles) Equipped with Tight and Loose Pulleys and Belt Shifter

Machine 7-27 simultaneously makes two parallel rows of lock stitching and the distance between the two needles may be from $\frac{3}{4}$ to 1 inch, as desired. This machine can also be furnished with a wider needle gauge, varying from 1 to $1\frac{1}{2}$ inches, in which case an extra charge will be made. The distance between needles must always be specified on the order for the machine. The machine has independent upper and lower feeds and can be adjusted to make stitches varying from $\frac{1}{8}$ to $\frac{1}{2}$ inch in length. It is equipped with tight and loose pulleys and a belt shifter and also has a foot lifter. Speed, 500 per minute, according to the material being sewn.

Lap seam fellers can be furnished with this machine, when desired, an extra charge being made for such attachments. Orders for lap seam fellers should specify the gauge of the machine, and the orders must also be accompanied with a sample of the material to be felled.

Machine 7-38 is the same as Machine 7-27 with the exception that it is equipped with the Singer Driving Attachment in place of the tight and loose pulleys and belt shifter.
Machine 7-50 simultaneously makes two parallel rows of lock stitching, the distance between the needles being one inch. This machine can also be furnished with a wider needle gauge up to 1 1/2 inches, in which case an extra charge will be made. The distance between the needles must be specified on the order for the machine. The machine has a drop feed and an adjustable presser either vibrating or stationary. It is equipped with tight and loose pulleys and a belt shifter. Speed, 500 per minute, according to the material being sewn.

Machine 7-51 is the same as Machine 7-50 with the exception that it is equipped with the Singer Driving Attachment in place of the tight and loose pulleys and belt shifter.

Machine 7-52 is the same as Machine 7-50 with the exception that it is fitted with two speed balance wheel 11358, for Singer Underdriver or for foot power stand, in place of the tight and loose pulleys and belt shifter.
Electric Motor Equipment for Machines of Class 7

Machine 7-31 on Table 29708 and Pressed Steel Stand 126616 Equipped with Singer Motor SD-101 or SD-102

Singer Motor SD-101 for 120 volts or SD-102 for 230 volts direct current are of one-half horse power with an approximate speed of 950 revolutions per minute, and are designed for inverted suspension under Table 29708 for the operation of Class 7 machines equipped with Singer Driving Attachments, by direct flat belt connection. They are supplied with a 4" x 1 1/2" double flanged iron pulley and conveniently located switch.

In addition to the economy and convenience of the individual drive equipment, as illustrated above, for general use in sail lofts and factories, its portability especially adapts it for use on ships of the naval and merchant marine, as it need not be permanently attached to a floor or deck, but may be moved as desired and the suspended position of the motor protects it from damage by water when decks are flooded or washed.

All inquiries and orders must state whether current is direct or alternating, voltage, and if alternating, the cycles and phase.
Electric Motor Equipment for Machines of Class 7

Machine 7-31 on Table 29711 and Pressed Steel Stand 126620
Equipped with Singer Motor SA-3052

The portable outfit, illustrated above, includes Machine 7-31 on table 29711 and Pressed Steel Stand 126620. With this equipment may also be included either of the Singer Motors SA-3050 to SA-3055 for alternating currents. These are polyphase motors of 60 cycles, one-half horse-power, having an approximate speed of 1725 revolutions per minute. The motor is suspended from the under side of the table, as shown, and is sent out with inverted bearings. The pulley of the motor is belted to the pulley of the table driving shaft.
Electric Motor Equipment for Machines of Class 7

Machine 7-31 on Table 29711 and Pressed Steel Stand 126619.

Table 29711 and Pressed Steel Stand 126619, illustrated above, should be ordered in case the machine is to be driven by either of the motors SA-3050 to SA-3055 when the motor is to be placed on the floor at the rear of the table, or bolted to overhead supports.

The use of equipment illustrated and described in this leaflet is not limited to machines here mentioned, but may be used with the other machines of Class 7.

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