

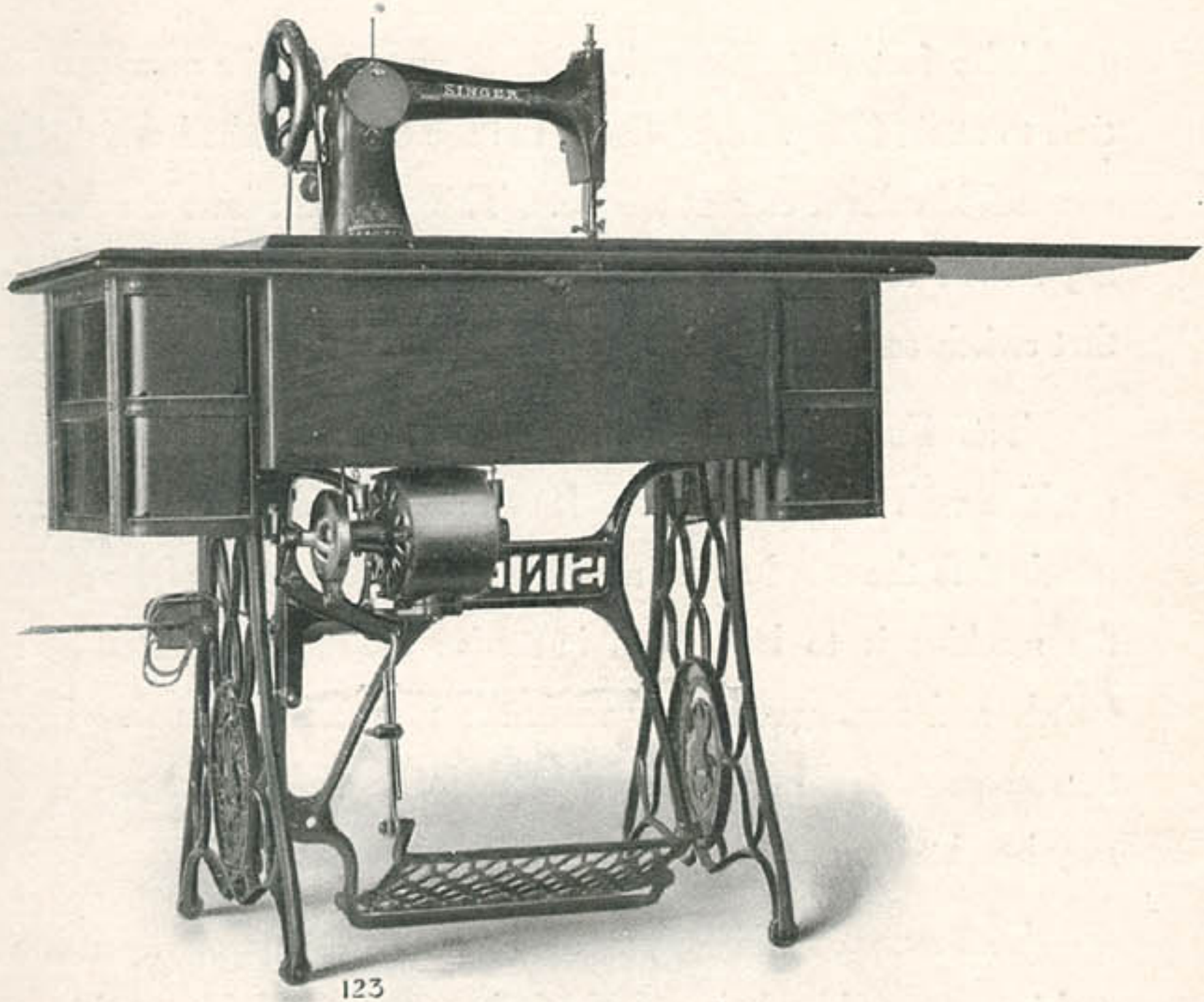
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BULLETIN No. 55
NOVEMBER, 1906

MOTORS

For Driving Sewing Machines

ALTERNATING CURRENT



Diehl Manufacturing Co.

ELIZABETHPORT,
New Jersey.

BRANCH OFFICES:
561-563 Broadway, New York.
128-132 Essex Street, Boston.
1217 Filbert Street, Philadelphia.
207-211 East Jackson Boulevard, Chicago.



Diehl Manufacturing Co.

THE use of individual motors for driving sewing machines has become recognized as a standard method of drive through the introduction of Diehl Apparatus designed for that purpose.

The success of the well known Diehl outfits for use on direct current circuits has led to a demand for a similar outfit suitable for use in connection with Alternating current circuits.

The fact that Alternating current motors require an appreciable period of time to attain full speed precludes the use of the method which has proven so successful in direct current service. This method allows a combination of starting switch and transmitter while with Alternating current motors it is necessary that switch and transmitter be separate and that the motor runs continuously.

The illustration on page 55-3 shows a front view of a manufacturing machine with motor attached. It will be noticed that a small snap switch is attached to the stand at the right and within easy reach of the operator. When the machine is to be placed in service the motor is started by means of the switch and runs continuously while the machine is in use. Pressure on the treadle starts the machine and by variation of the pressure any desired speed may be obtained.

The transmitter is composed of two wheels one of which is a loose pulley and is connected by belt with the balance wheel of the machine. The other wheel is secured to the motor shaft. Between these wheels is carried a friction washer of fibre which is compressed between them when pressure is applied at the treadle. Attached to the lever which transmits the pressure of the treadle to the friction device is a brake which by means of a spring stops the machine instantly when pressure on the treadle is released. It will be readily noticed from this description that the number of parts is a minimum and the outfit simplified to the utmost.

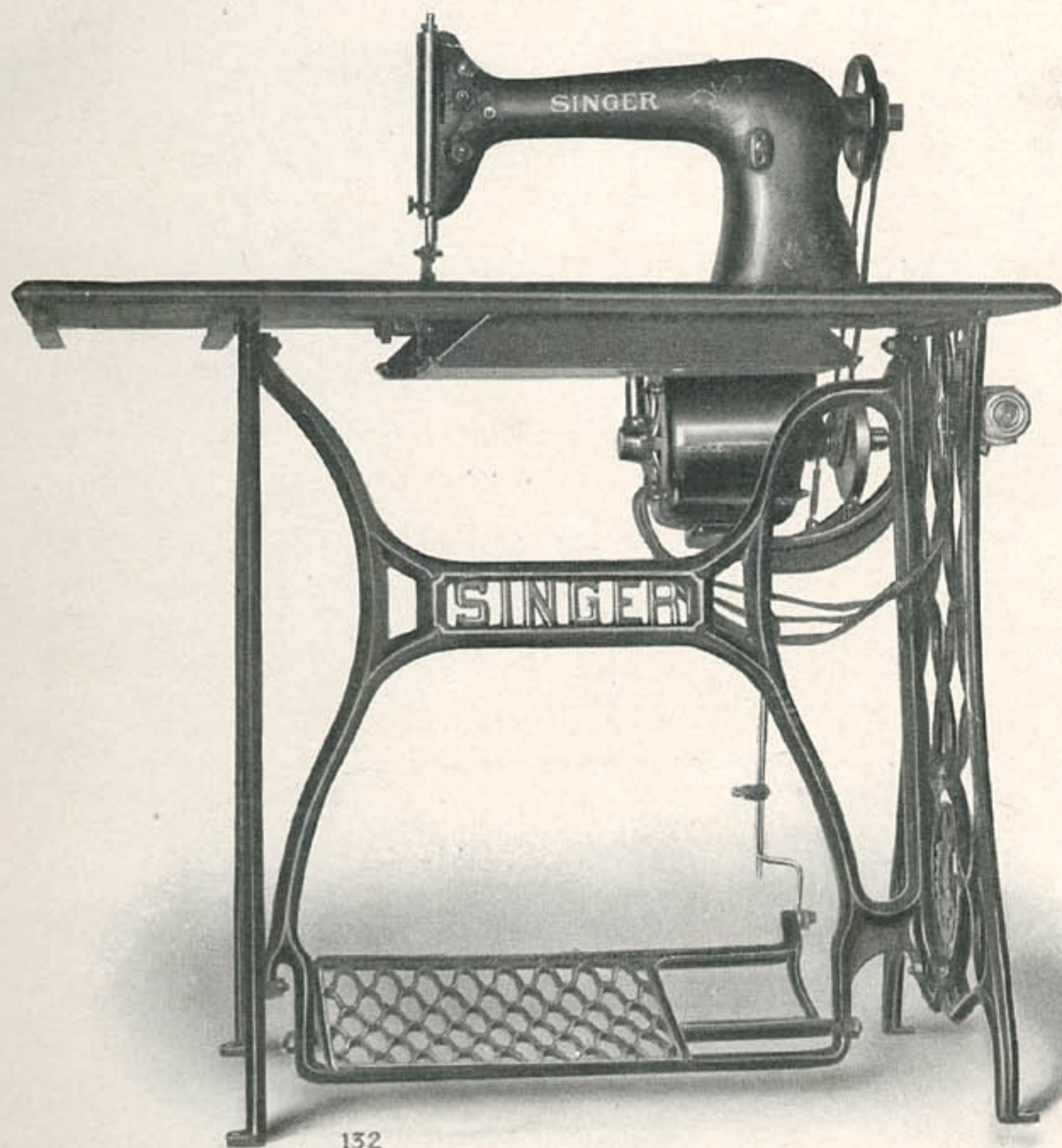
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Diehl Manufacturing Co.

55-3

THE motors are rated $\frac{1}{25}$ Horse Power at 900 stitches per minute for family and light manufacturing, and $\frac{1}{6}$ Horse Power at 2100 stitches per minute for heavy manufacturing, and may be used on any flat table machine.

They are bolted to the under side of the table at the rear by means of a bracket provided for that purpose and should be so located that the motor pulley is in line with the balance wheel pulley in every case.



Drop cabinet machines require special brackets for attaching and outfits for this style of machines are furnished only for Singer and Wheeler & Wilson machines. The illustration on front page shows $\frac{1}{25}$ Horse Power motor attached to a Singer Drop Cabinet machine.

The motor is mounted on a special bracket which carries an idler pulley. The idler and driving pulleys are so located that the belt passes through holes in the lifting plate provided for that purpose. To install the motor the band wheel is removed and the bracket carrying the entire outfit substituted in its place and held in the same manner.

Diehl Manufacturing Co.

THE outfit includes motor, bracket, transmitter, lever, switch, attachment plug and pitman rods.

As treadles are usually provided with machines they are not included in the price of the outfit but will be furnished when specially ordered at an additional price of \$1.00 list.

Code Word	Catalogue No.	Rated H. P.	Volts	Cycles	Stitches Per Min.	Selling Price
*Umbobar . .	0200	$\frac{1}{25}$	100-110	60	900	\$24.00
Umbocon . .	0201	$\frac{1}{25}$	200-220	60	900	25.00
Umbodip . .	0204	$\frac{1}{25}$	100-110	50	900	25.00
Umboful . .	0205	$\frac{1}{25}$	200-220	50	900	26.00
Umboger . .	0206	$\frac{1}{25}$	100-110	133	900	25.00
Umbokot . .	0207	$\frac{1}{25}$	200-220	133	900	26.00
Ungabar . .	0210	$\frac{1}{6}$	100-110	60	2100	29.00
Ungacon . .	0211	$\frac{1}{6}$	200-220	60	2100	31.00
Ungadip . .	0214	$\frac{1}{6}$	100-110	50	2100	34.00
Ungaful . .	0215	$\frac{1}{6}$	200-220	50	2100	36.00
Ungager . .	0216	$\frac{1}{6}$	100-110	133	2100	34.00
Ungakot . .	0217	$\frac{1}{6}$	200-220	133	2100	36.00

Motors for circuits of 25 and 40 Cycles prices on application.

*Motors arranged for Drop Cabinet machines, $\frac{1}{25}$ H. P. Size only.

Price \$1.50 net extra. Add "Ed" to code words given above and "D" to Catalogue No.

Thus, $\frac{1}{25}$ H. P., 100 volt., 60 cycle motor for Drop Cabinet Machine, Catalogue No. 0200-D, Code word, "Umbobared."