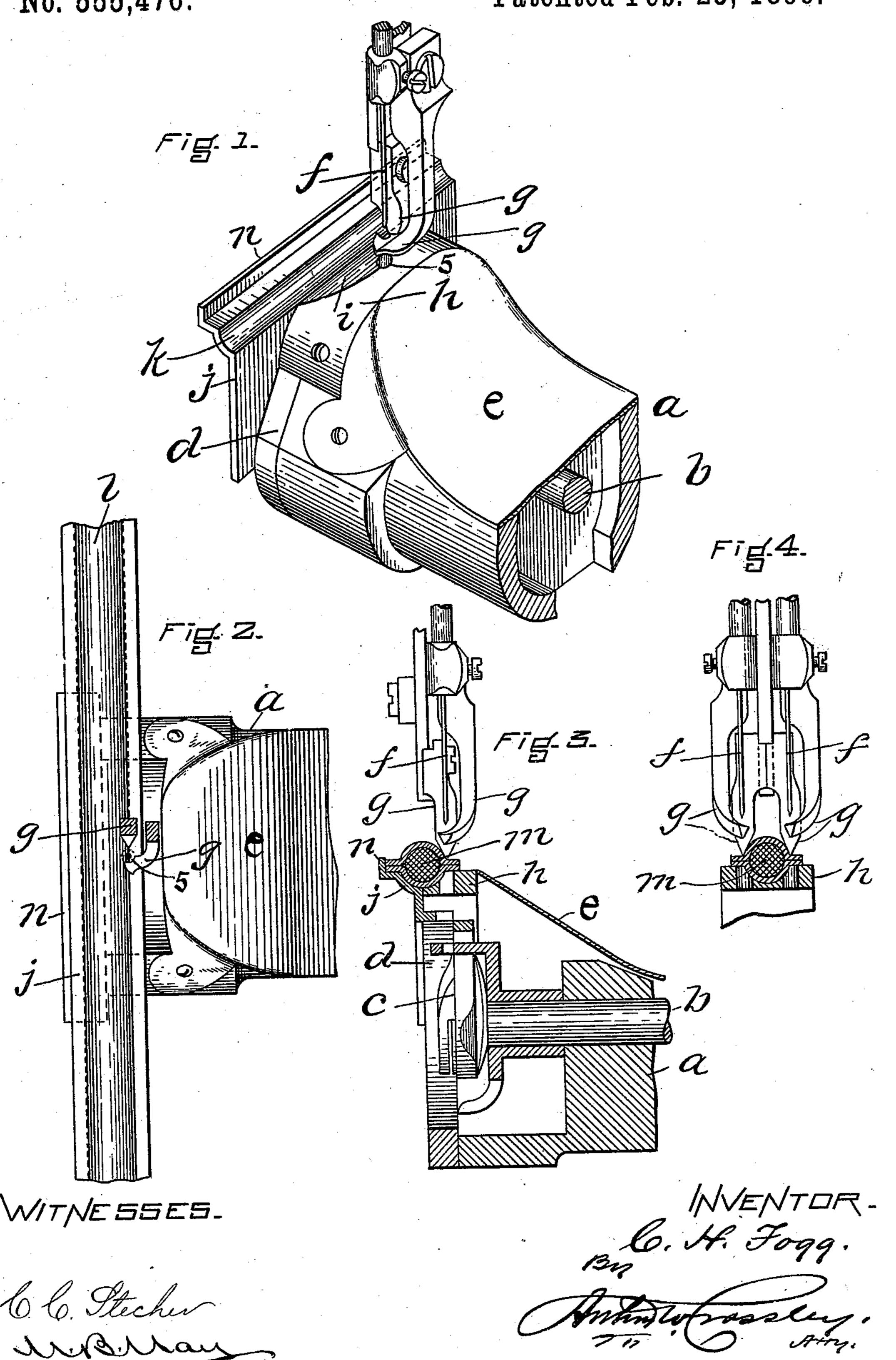
C. H. FOGG. WORK PLATE FOR SEWING MACHINES.

No. 555,476. Patented Feb. 25, 1896.



United States Patent Office.

CHARLES H. FOGG, OF BOSTON, MASSACHUSETTS.

WORK-PLATE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 555,476, dated February 25, 1896.

Application filed January 5, 1895. Serial No. 533,979. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. FOGG, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and 5 useful Improvements in Work-Plates for Sewing-Machines, of which the following is a specification.

This invention has relation to that class of sewing-machines generally known as "cylin-10 der," and it has for its object the provision of such improvements as will better adapt them to the manufacture of that kind of reins for harness in which a rope or cord is inclosed between two strips of leather, the edges of which 15 are stitched together along on opposite sides

of the rope or cord.

To these ends my invention consists in grooving the work-plate, which is situated at the end of the cylinder-arm, on a line trans-20 versely of the cylinder-arm and combining with the same a similarly-grooved guide-plate connected with the outer part of the shuttlerace, or otherwise supported, the grooved plate and groove in the work-plate forming a 25 true-fitting guide for the rounded part of the rein in the process of sewing the same. In case two gangs of needles are employed, so as to sew on both sides of the cord or rope at the same time, I may dispense with the guide-30 plate and employ a substantially half-round groove in the work-plate, extending transversely or across the cylinder-arm, all as I will now proceed to describe and claim.

Reference is to be had to the annexed draw-35 ings and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a perspective 40 view of the outer end of the cylinder-arm of a cylinder sewing-machine and its immediate adjuncts, showing the same as equipped with my improvements. Fig. 2 is a plan view of the same, the parts immediately above the work-plate being shown in horizontal section and a short section of work being represented in position. Fig. 3 is a side elevation of what is represented in Fig. 2, the parts below the needle and its accompanying parts being 50 shown as in section taken centrally on a line

running longitudinally of the cylinder-arm. Fig. 4 is a sectional detail view in front elevation, showing my improvement as employed in connection with two gangs of needles.

In the drawings, a designates the cylinder- 55 arm in which the shuttle-shaft b is supported and runs.

c is the shuttle which revolves in a race, of which the ring or plate d forms the outer part or wall.

e is a guard-plate on the upper forward part of the cylinder-arm covering certain of the exposed parts.

f is the needle, and g g the work holding and feeding devices.

The parts and features thus far described may be of usual form and construction in cylinder sewing-machines, and have not been changed or modified in function in the carrying out of my invention.

h designates the work-plate, which in the machine as commonly constructed has a flat or flush upper surface, through which is formed the needle-opening 5, such opening being arranged to one side of the groove which 75 serves as a guide for the rein, as will be hereinafter described, so that that portion of the rein which is being sewed has a firm and flat

bearing-surface to rest upon.

In the manufacture of such articles as reins 80 for harness in which a rope or cord is inclosed between two pieces of leather, as before explained, it is difficult to guide the work accurately on such common form of work-plate and at the same time afford a firm bearing for 85 the flat seam or seams which project beyond the cylindrical portion of the rein. To better suit the machine to this class of work and enable the latter to be guided with the greatest accuracy, I provide the outer portion of 90 the work-plate with a substantially quarterround groove i, and connect a guide-plate j with the outer wall d of the shuttle-race, providing the said plate on its upper side with a substantially quarter-round groove k, which, 95 when matched with the groove i in the workplate, forms a substantially half-round groove for the reception of the rounded part l of the rein, in which rounded part the rope or cord m is inclosed.

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The grooved part of the guide-plate may be of considerable length, as shown, and may have a vertical flange n on its outer edge or side to form a guide for the outer edges of the

5 cord-covering material.

The guide-plate j is made necessary where the work-plate or bed is near the end of the cylinder, and where but a single needle is employed. In case the work-plate is not so 10 near the end of the cylinder, as in instances where two needles are employed, as is shown in Fig. 4, the substantially half-round groove may be formed directly in the work-plate, so as to constitute a guide for the rounded part 15 of the rein, with a flat bearing-surface on each side of the grooved part of the work-plate, there being a needle-opening through each of said flat bearing-surfaces.

The essential feature of my invention is the 20 work-plate provided with a half-round groove extending transversely of the cylinder-arm, or in line with the feed of the material, and with a flat bearing-surface at one side of the groove, through which bearing-surface is

25 formed the needle-opening.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which

it may be made or all of the modes of its use, 30 it is declared that what is claimed is—

1. The combination, with the cylinder-arm of a sewing-machine of the work-plate provided with a rounded groove extending in the line of the feed, and a guide-plate j grooved 35 correspondingly to the work-plate and affixed to the end of the cylinder-arm of the machine in position to have its groove match with the groove in the work-plate.

2. The combination with the work-plate of 40 a cylinder sewing-machine, provided with a rounded groove extending in the line of the feed, of a grooved guide-plate j secured to the end of the cylinder-arm of the sewingmachine and grooved correspondingly to the 45 work-plate, and affixed to the machine in position to have its groove match with the groove in the work-plate, the said plate k being provided on its outer edge with a vertical guiding-flange.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 30th day of

October, A. D. 1894.

CHARLES H. FOGG.

Witnesses:

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ARTHUR W. CROSSLEY, C. C. STECHER.