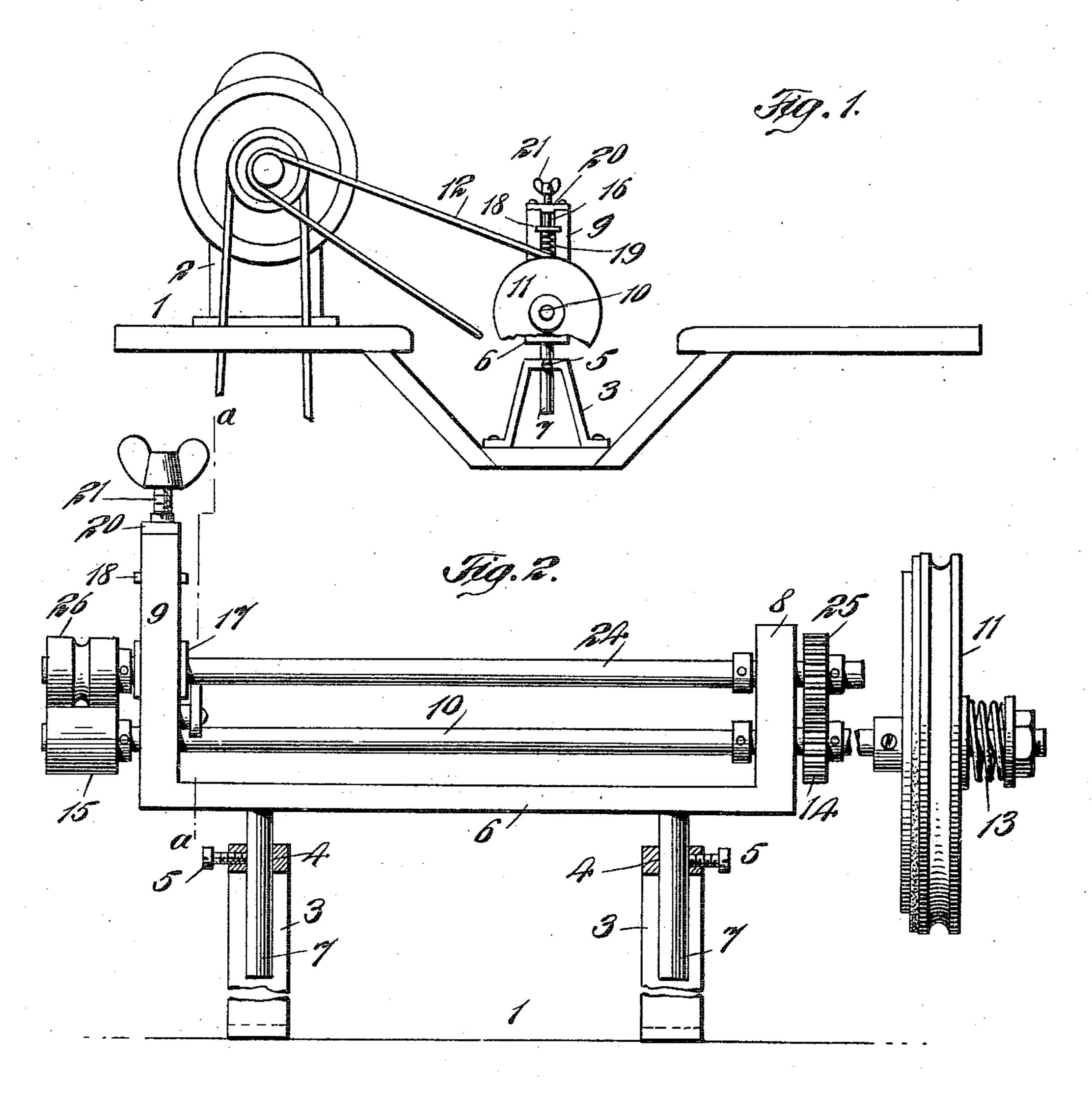
A. DIRMANN.

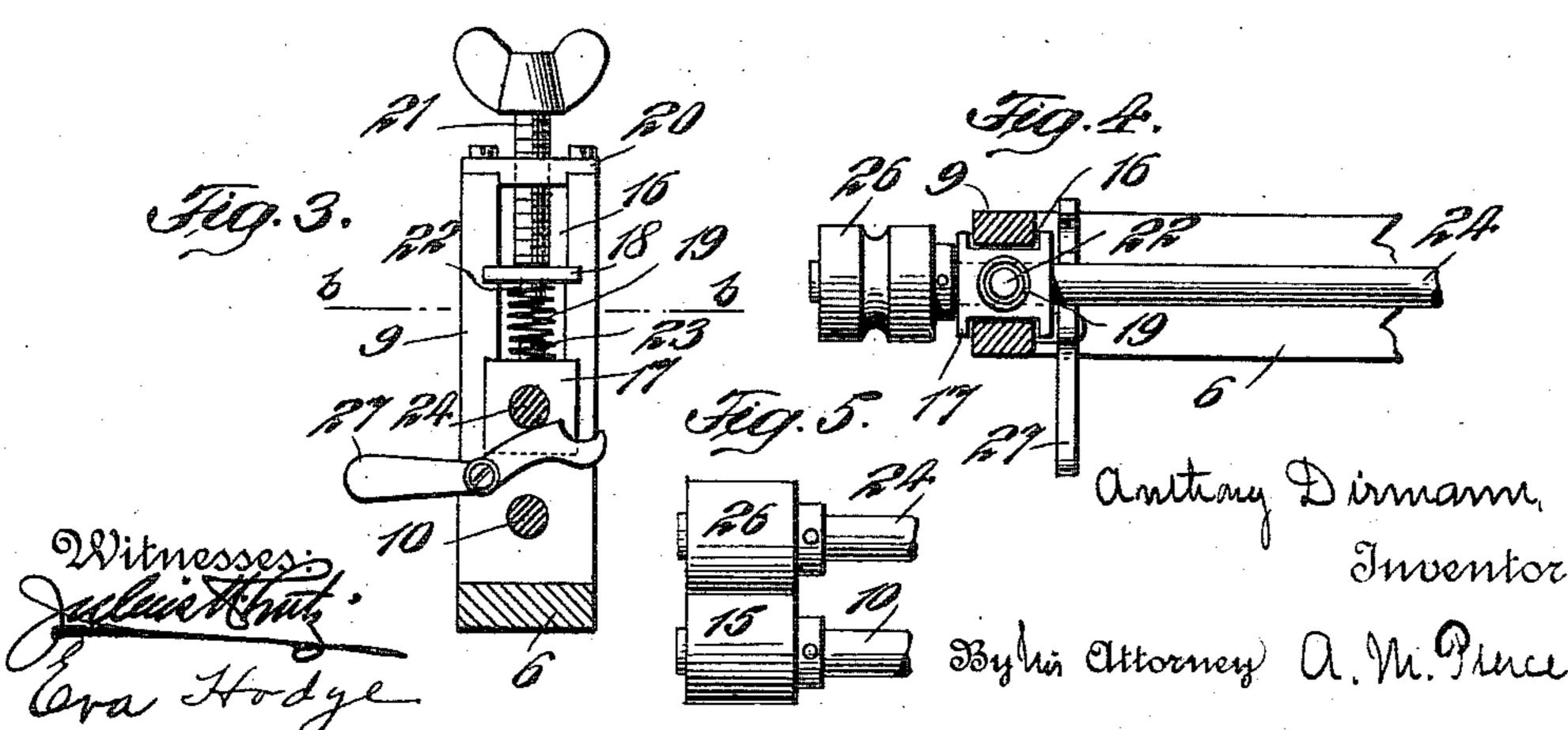
FEEDING-OFF DEVICE FOR SEWING MACHINES.

APPLICATION FILED DEC. 17, 1909.

985,733.

Patented Feb. 28, 1911.





UNITED STATES PATENT OFFICE.

ANTHONY DIRMANN, OF NEW YORK, N. Y.

FEEDING-OFF DEVICE FOR SEWING-MACHINES.

985,733.

Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed December 17, 1909. Serial No. 533,570.

To all whom it may concern:

Be it known that I, Anthony Dirmann, a citizen of the United States, residing at New York, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Feeding-Off Devices for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates especially to devices for use in connection with sewing machines, and has for its object the provision of means and mechanism for receiving and feeding off any continuous strip or body as it passes from beneath the needle, after stitching.

To attain the desired end, my invention consists in certain novel and useful combinations or arrangements of parts, and peculi-arities of construction and operation, all of which will be hereinafter first fully described and then pointed out in the claim.

In the drawing, Figure 1 is a side elevation of a sewing machine and table, wherewith my device is employed. Fig. 2 is a front elevation of my feeding off device. Fig. 3 is a vertical sectional view at line a—a of Fig. 2. Fig 4 is a horizontal, sectional view at line b—b of Fig. 3. Fig. 5 is a detail of a modification of the gripping rollers shown in Figs. 2 and 4.

Similar numerals of reference, wherever they occur, indicate corresponding parts in all the figures.

1 is a sewing machine table, and 2 is a sewing machine mounted thereon.

3, 3 are standards provided with perforations 4 into which set screws 5 enter.

6 is the main frame of my device provided 40 with supporting rods 7 arranged to enter the perforations 4 for the purpose of providing vertical adjustment for the main frame 6.

S and 9 are upwardly extending arms car-

45 ried by the main frame 6.

10 is a rotatable shaft journaled in the arms 8 and 9. This shaft is provided near one extremity with a driving wheel 11, grooved for the reception of a belt 12 which may be driven from the sewing machine, or any other suitable source of power.

13 is a spring which, while providing tension enough to drive the device, will permit the wheel 11 to slip, if the condition of the

work being performed requires such move- 55 ment, or the goods being fed-off are retarded in movement.

14 is a gear wheel on the shaft 10, and 15 is a gripping roller upon said shaft.

The arm 9 has a slot 16 therein for the re- 60 ception of a vertically movable bearing

block 17.

18 is a cross-piece mounted in the slot

above the bearing block 17, and 19 is a tension spring located between the block 17 and 65 cross-piece 18.

20 is a cap over the slot 16, and 21 is a wing screw passing through the cap and

engaging the cross-piece 18.

22 and 23 are studs which retain the 70 spring 19 in place. By this means the pressure exerted upon the block 17 may be accurately regulated in accordance with the work being done.

24 is a shaft journaled in the arm 8 and in 75

the block 17.

25 is a gear upon said shaft which meshes

with the gear 14.

26 is a gripping roller upon the shaft 24, arranged to contact with the gripping roller 80 15. This roller may be grooved, as in Figs. 2 and 4, in order to accommodate a cord, or the like being sewed to a strip of material, or plain, for plain work, as required, without departing from the spirit of my invense tion.

27 is an arm by which the shaft 24 may be raised, throwing the roller 26 out of contact with the roller 15 when work is to be inserted between the rollers.

When constructed and arranged in accordance with the foregoing description, my feeding-off device, while simple, will be found very effective in operation. By its use a proper removal of completed work is 95 insured, saving much time and labor, greatly increasing the capacity of the machine wherewith it is employed.

Having now fully described my invention, what I claim as new and desire to secure by 100

Letters Patent, is:

The combination with a sewing machine of a feeding-off device in which is comprised a main frame, a shaft rotatably mounted therein, a gear upon said shaft, 105 means for driving said shaft at a variable tension comprising a loose driving wheel 11 and spring 13 bearing thereon, a gripping

roller carried by said shaft, a second shaft rotatably mounted in the main frame in proximity to said first mentioned shaft, one of the bearings of said shaft being movable, a gripping roller upon said shaft and a gear which meshes with the gear upon the first mentioned roller-shaft, means for raising and lowering said shaft, and means for regu-

lating the pressure exerted between the gripping rollers.

In testimony whereof I hereto affix my signature in presence of two witnesses.

ANTHONY DIRMANN.

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Witnesses:

F. A. CHICKERING,

A. M. PIERCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."