

No. 719,688.

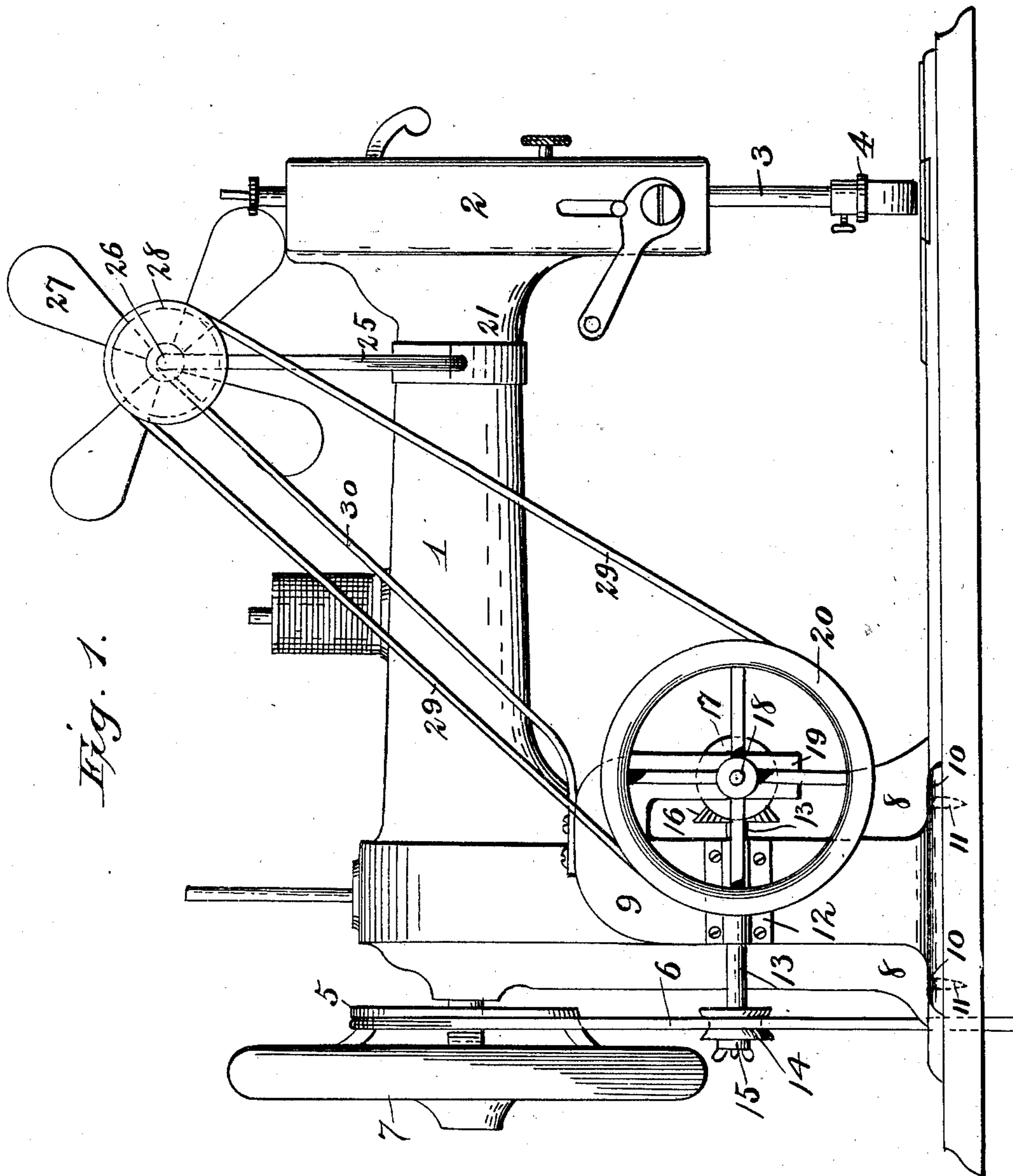
PATENTED FEB. 3, 1903.

W. C. NORMAN.  
FAN ATTACHMENT.

APPLICATION FILED NOV. 11, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
F. L. Ourand  
J. C. Lambert,

Inventor  
W. C. Norman  
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Attorney

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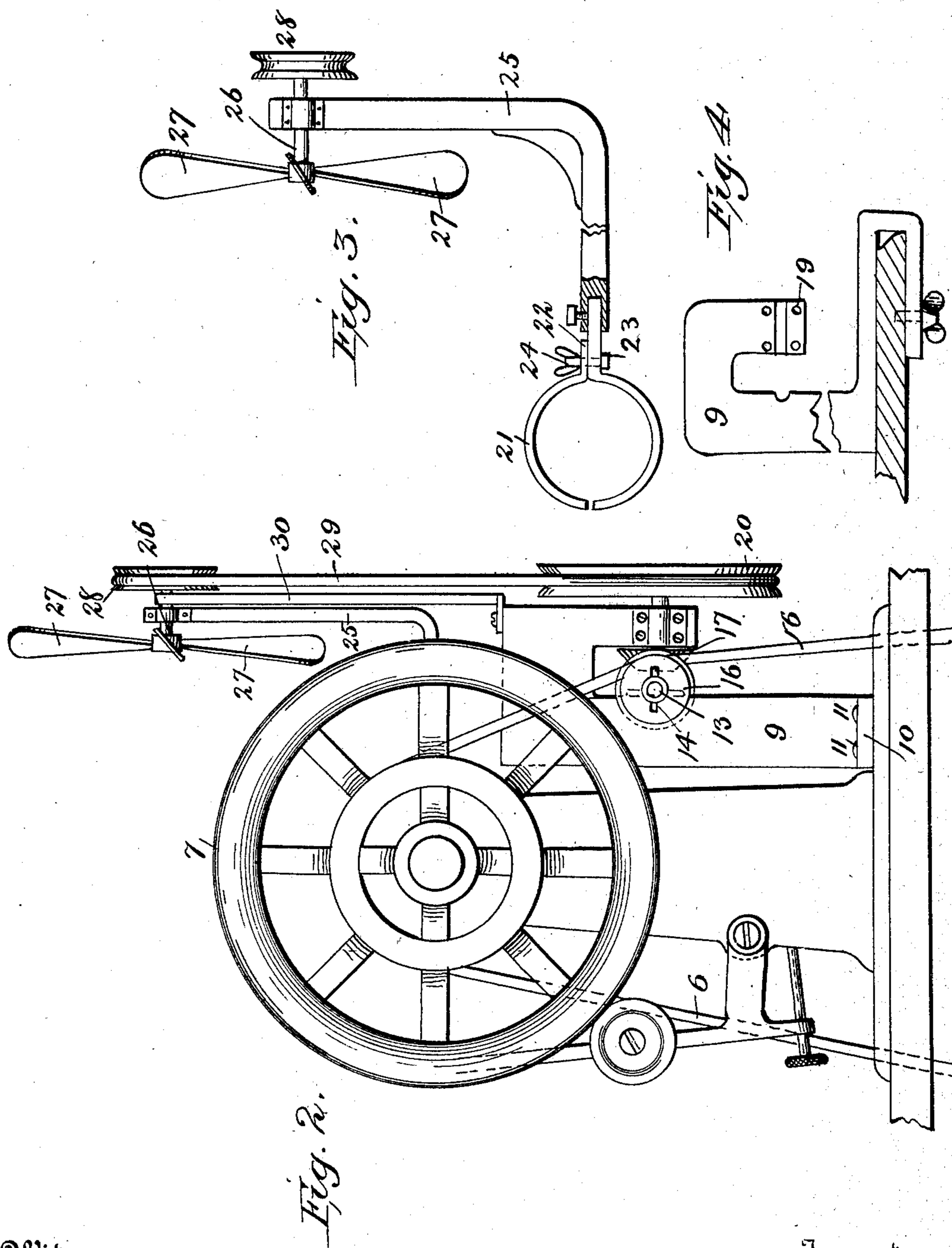
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NO MODEL.

2 SHEETS—SHEET 2.



Witnesses  
F. L. Curran  
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# UNITED STATES PATENT OFFICE.

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TO THOMAS CECIL NORMAN, OF SMITHTON, ARKANSAS.

## FAN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 719,688, dated February 3, 1903.

Application filed November 11, 1902. Serial No. 130,859. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. NORMAN, a citizen of the United States, residing at Smith-ton, in the county of Clark and State of Ar-kansas, have invented certain new and useful Improvements in Fan Attachments, of which the following is a specification.

My invention is a fan attachment to sew-ing-machines and mechanism for driving the same in connection with the band mechanism of the machine; and it consists in a frame attached to the table of a machine provided with mechanism to run a band-wheel and a band extending to the band-wheel of the fan.

In the accompanying drawings, Figure 1 is a rear elevation of a high-arm sewing-machine with my invention attached thereto. Fig. 2 is an end view of Fig. 1. Fig. 3 is a detail view showing an elbow-arm and a clamp for securing the same to the arm of the machine and a bearing in which the fan and band-wheel are secured. Fig. 4 is a detail view showing the frame containing the gearing part of my device clamped to the table of a machine instead of being screwed thereto.

My invention is described as follows:

Fig. 1 represents the rear elevation of a high-arm sewing-machine, in which 1 represents the arm; 2, the plunger-frame; 3, the plunger; 4, the needle-holder; 5, the band-wheel; 6, the band; 7, the balance-wheel, and 8 the standard by which the machine is se-cured to the table. Mounted on the table and in rear of the standard 8 is a framework 9, which may be described substantially as an inverted U with one arm shorter than the other. This U is provided with perforated feet 10, through which it is secured to the table by means of screws 11. Secured mid-way the long arm of this frame 9 is a bearing 12, in which is journaled an axle 13. On the left-hand end of this axle 13 is journaled a grooved pulley 14, against which the band 6 runs and rotates it. This band 6 may run on either side of the pulley. In the drawings it is represented, however, as running on the near side or that side which is nearest the machine. This pulley 14 is secured rigidly on the end of the shaft 13 by means of a thumb-nut 15; but when I do not want the fan to run I loosen this thumb-nut and then

this pulley 14 becomes an idler. On the right-hand end of the shaft 13 is a bevel gear-wheel 16, which meshes with a bevel gear-wheel 17, secured on a shaft 18, journaled in the lower end of the short arm 19 of the U-shaped frame 9. The shaft 18 of the bevel gear-wheel 17 passes through the lower end of the short arm 19, and on the rear end thereof is rigidly secured a band-wheel 20.

Secured to the arm of the machine near the plunger-frame 2 is a clamp 21, having extend-ing from it two projections 22 and 23, and through these projections runs a thumb-screw 24, by which the said clamp is secured to said arm. Secured to the lower projection 23 of the clamp 21 is an elbow-arm 25, and to the upper end of this arm 25 is journaled an axle 26, and on the front end of this axle 26 is rigidly secured a fan 27, and on the rear end of said axle is rigidly secured a pulley 28. A band 29 runs over the band-wheel 20 and the pulley 28.

The operation of the fan is apparent, but may be described briefly by saying that when the machine is in motion the band 6 of the machine operates the pulley 14, which in turn operates the mechanism described, which is secured to the table, the band-wheel 20 of which runs the pulley 28, which pulley, operating the shaft 26, runs the fan 27. When I do not wish the fan to go, I loosen the thumb-nut 15.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A frame 9, in the shape of an inverted U, secured to the table of a sewing-machine, in rear of its standard 8; a shaft 13, journaled on a line with the arm of the sewing-machine to said frame; a pulley 14, secured on the end of said shaft, in a line with the machine-band 6, and adapted to be operated thereby; a thumb-nut 15, working on the end of said shaft 13, and adapted to hold said pulley rigidly in place; a bevel gear-wheel 16, rigidly secured on the other end of said shaft; a bevel gear-wheel 17, meshing with said bevel gear-wheel 16, and secured on the end of an axle 18; an axle 18, journaled in the lower end 19, of the frame 9; a band-wheel 20, rigidly secured on the rear end of the

shaft 18; a clamp 21, secured around the arm  
1; an elbow-arm 25, secured to said clamp,  
and extending backwardly and upwardly; a  
shaft 26, journaled to the upper end of said  
5 arm; a pulley 28, secured to the rear end of  
said shaft; a fan 27, secured to the front end  
of said axle, and a band 29, working around  
the band-wheel 20, and the pulley 28, sub-

stantially as shown and described and for  
the purposes set forth. 10

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

WILLIAM C. NORMAN.

Witnesses:

M. WRIGHT,  
NORMAN SMITH.