

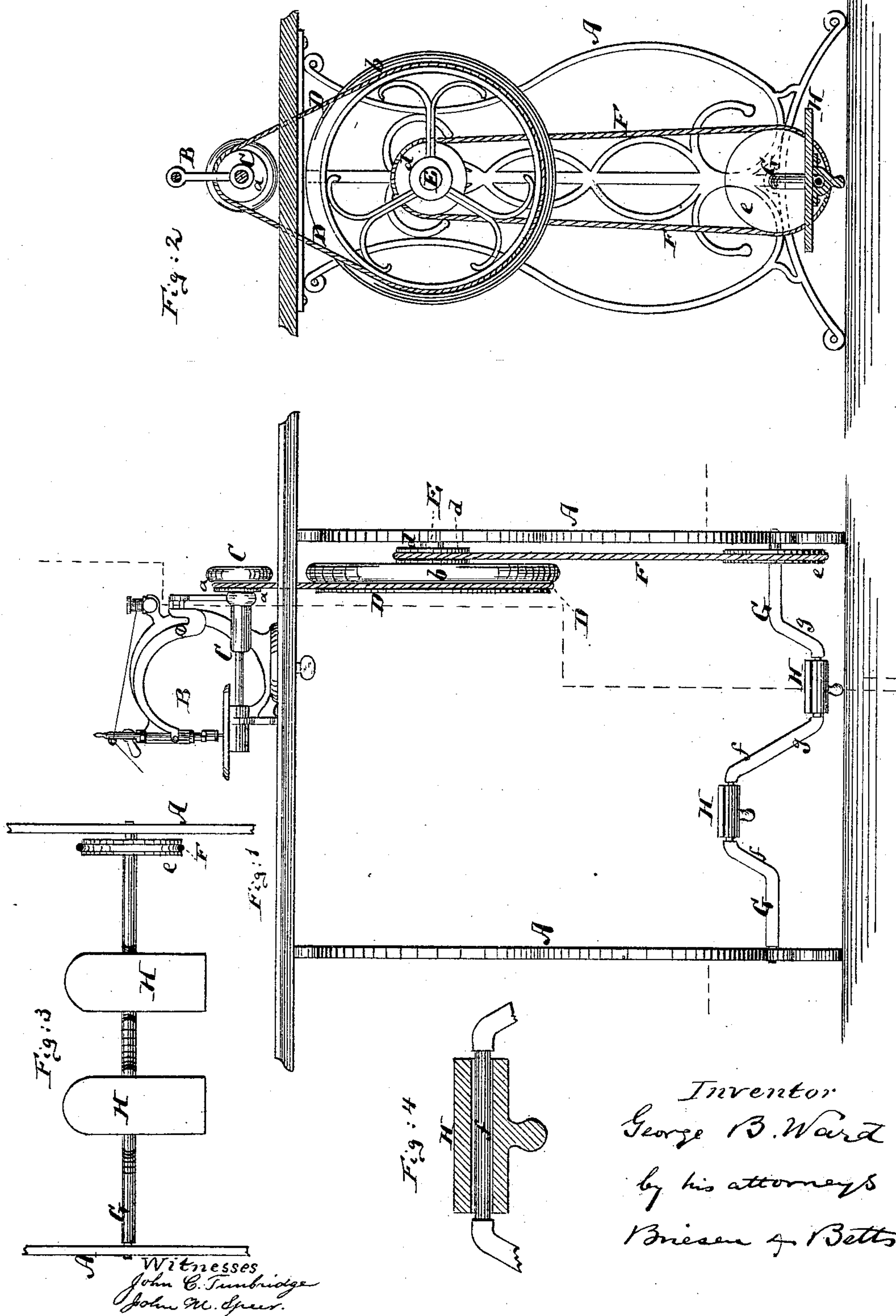
(No Model.)

G. B. WARD.

TREADLE ATTACHMENT FOR SEWING AND OTHER MACHINERY.

No. 270,863.

Patented Jan. 16, 1883.



# UNITED STATES PATENT OFFICE.

GEORGE BARCLAY WARD, OF NEW YORK, N. Y.

## TREADLE ATTACHMENT FOR SEWING AND OTHER MACHINERY.

SPECIFICATION forming part of Letters Patent No. 270,863, dated January 16, 1883.

Application filed October 24, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE BARCLAY WARD, of New York, in the county and State of New York, have invented an Improved Treadle Attachment for Sewing and other Machines, of which the following is a specification.

Figure 1 is a side elevation of a sewing-machine with my improved treadle attachment. Fig. 2 is an end elevation of the same. Fig. 3 is a top view of the treadle attachment, and Fig. 4 a detail longitudinal section through one of the swiveled foot-supports.

My invention has for its object to facilitate the driving of a sewing-machine; and it consists in the combination, with the double crank foot driving-shaft of a sewing-machine, of a fly-wheel and pulley and belts extending to the foot-shaft and machine-pulleys, as fully described hereinafter, so as to relieve the operator from the labor incident to rotating the shaft without a fly-wheel and secure a greater speed and more uniform action.

In the accompanying drawings, the letter A represents the frame of a suitable sewing-machine; B is the sewing-machine; C, the shaft of the machine which is to be revolved; D, a belt or chain passing over a pulley, *a*, on shaft C and over a pulley, *b*, on another shaft, E, that carries a fly-wheel, as shown. The shaft E receives the rotary motion by a belt or chain, F, which passes over a pulley, *d*, on shaft E and over another pulley, *e*, on a shaft, G. The shaft G is hung in the lower part of the frame A, and is provided with two cranks, *f* and *g*, that project preferably in diametrically-opposite directions from the axis of said shaft G, but may be placed at another angle, if desired.

Upon each of the cranks *f g* is swiveled a foot-support, H, which has a proper surface on top for the support of the foot of the operator, and which, embracing the crank-pin, allows the latter to revolve freely, while the foot-board is held in the horizontal position. The operator, seated on a suitable chair or bench, holds the feet on the swiveled foot-supports H H, and by very slight exertion will be enabled to impart rotary motion to the shaft G. The motion of the shaft is transmitted by the belts or chains F and D to the shaft C of the sewing or other machine.

My invention is distinguished from those in which double crank foot shafts have been employed by the interposition between the machine and the crank-shaft of a fly-wheel and pulley. By this combination the momentum of the fly-wheel is made the means of continuing the motion of the treadle, relieving the operator of much of the labor incident to prior constructions, and rendering it possible to drive the machine at a speed not otherwise attainable.

Without, therefore, claiming the use of the double crank shaft, broadly, I claim—

The combination, with a machine and with a double crank foot driving-shaft, of an intermediate fly-wheel and pulley and belts D F, as set forth.

This specification of my invention signed by me this 21st day of October, 1882.

GEO. BARCLAY WARD.

Witnesses:

WILLIAM H. C. SMITH,  
JULIUS HUELSEN, Jr.