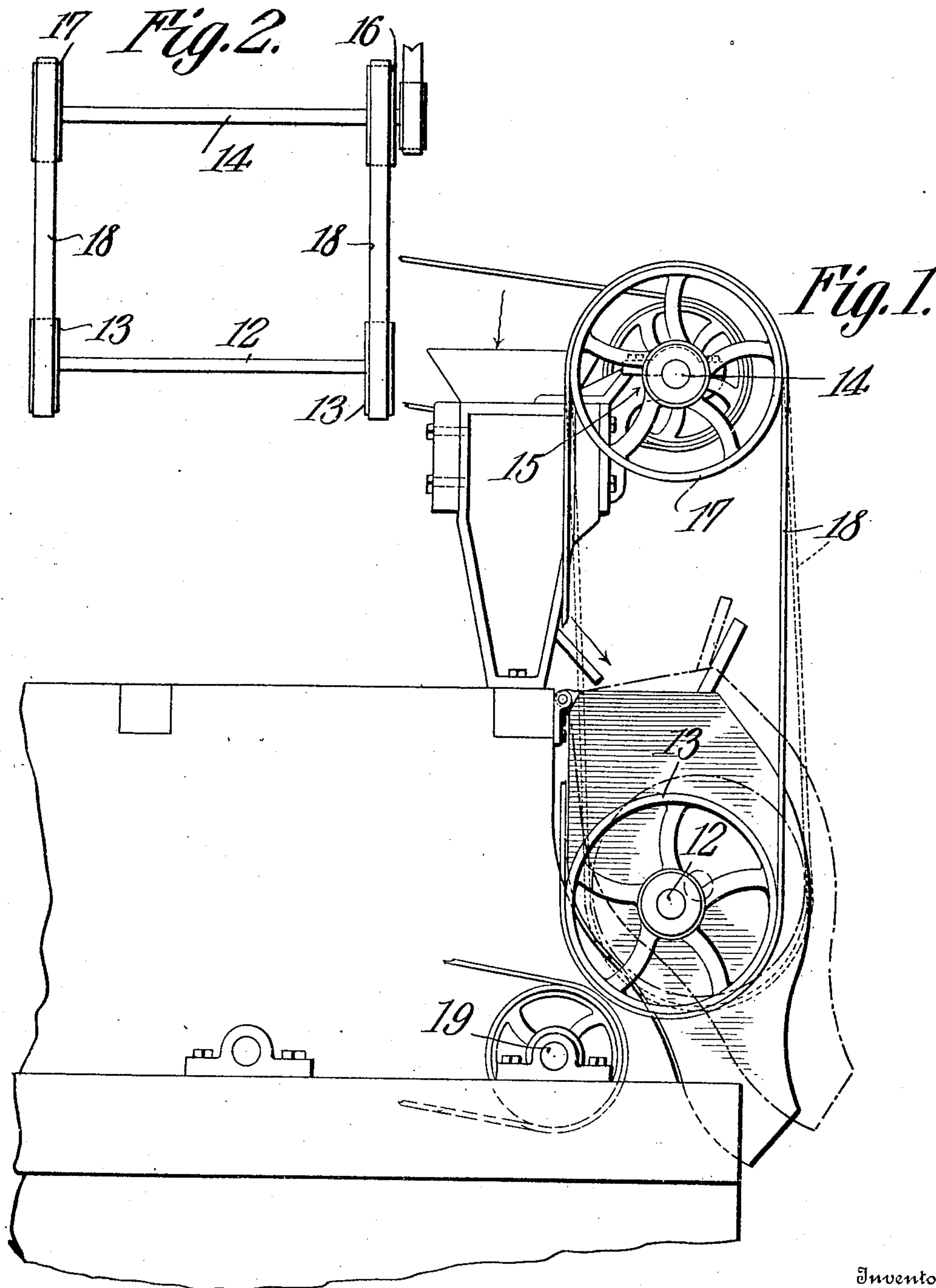


No. 882,453.

PATENTED MAR. 17, 1908.

J. DAVIDSON.
COTTON SEED LINTING MACHINE.
APPLICATION FILED JUNE 18, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH DAVIDSON, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-HALF TO WALTER D. NASH,
OF ATLANTA, GEORGIA.

COTTON-SEED-LINTING MACHINE.

No. 882,453.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed June 18, 1906. Serial No. 322,258.

To all whom it may concern:

Be it known that I, JOSEPH DAVIDSON, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Cotton-Seed-Linting Machine, of which the following is a specification.

This invention relates to certain improvements in cotton seed linting machines, and has for its principal object to provide improved means for positively feeding the float shaft, and for throwing said float shaft out of operation when the breast which carries such shaft is raised.

In the accompanying drawing:—Figure 1 is a side elevation of a portion of a cotton seed linting machine illustrating a portion of the actuating mechanism. Fig. 2 is a front elevation of the float shaft and driving connections.

Similar numerals of reference indicate corresponding parts throughout the several figures of the drawings.

The float shaft 12 is provided at each end with a pulley 13 and above the float shaft is a shaft 14 that is journaled in bearings 15 in top of the feed box. This shaft 15 has a pulley 16 at one end, and a pulley 17 at the opposite end. Two endless belts 18 connect the pulleys 16 and 17 with the pulleys 13 of the float shaft, and when the hinged or movable breast of the linter is down in normal position, the weight of the breast, the float shaft and the pulleys 13 is imposed on the belts 18, and the latter are tightened for the purpose of putting the float shaft in operation, the shaft 14 being constantly revolved from any suitable source of power. When the breast is raised, the float shaft is carried up with it, and the belts 18 are slackened, so that the rotative movement of the float shaft ceases.

The saw shaft 19 may be operated from any suitable source of power, but it is preferred to operate the float driving shaft 14 by some means independent of or outside the linting machine, as shown in Fig. 2.

With a driving mechanism constructed in

the manner described, the float shaft is revolved positively and uniformly without any of the shocks and jars incident to the use of friction pulleys in this connection, while the driving movement of the belt 18 ceases as soon as the breast is raised. It will be further seen that as the breast gradually rises the friction between the float shaft pulley and its driving belt will be gradually decreased, so that the driving effect will be to some extent lessened, and this driving effect will gradually decrease until the driving movement stops entirely, so that the operation is automatic, the driving of the float shaft being in proportion to the extent to which the breast is elevated.

From the foregoing description it will be seen that the breast is so mounted and arranged as to be lifted by accumulations of cotton to avoid choking of the machine at this point and, owing to the hereinbefore described effect of such lifting of the breast, the operation of the machine is automatically regulated and made approximately uniform.

I claim:—

In a cotton seed linting machine, the combination with a movable breast arranged to be lifted by accumulations of cotton therein, of a float shaft supported by the breast, pulleys on said float shaft, a revoluble shaft having stationary bearings, and driven independently of the linting machine connection and, also, provided with pulleys, and a pair of belts connecting the float shaft to said revoluble shaft, said belts being slackened to lessen or stop the driving movement of the float shafts in proportion to the extent to which the breast is raised, the decreasing driving speed of the float shaft being in inverse proportion to the quantity of cotton accumulated in the breast.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH DAVIDSON.

Witnesses:

N. M. SHANLIS,
A. D. KENNEDY.