(No Model.)

G. L. JAEGER.

COMPACTING PAPER STOCK AND OTHER VEGETABLE FIBERS FOR TRANSPORTATION.

No. 254,326. Patented Feb. 28, 1882.

Fig. 1.

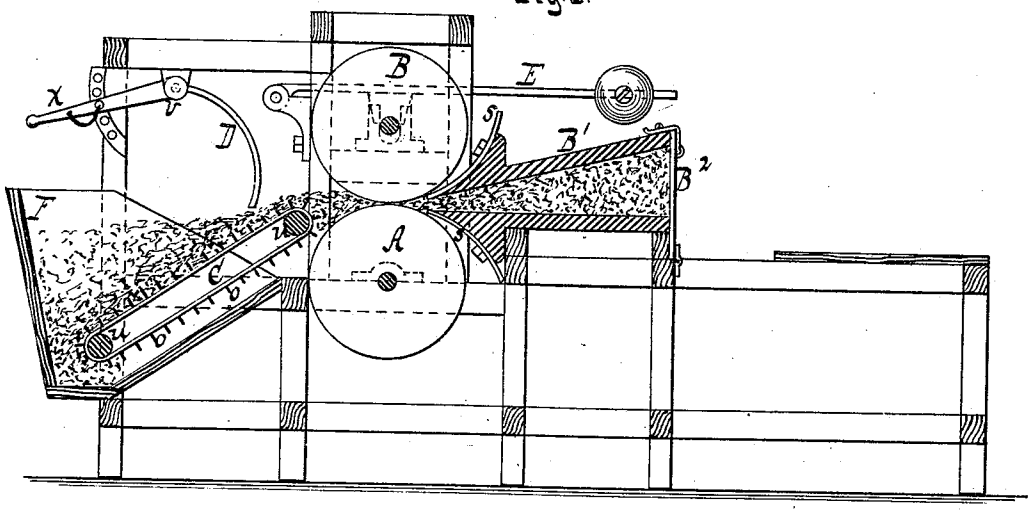


Fig. 2.

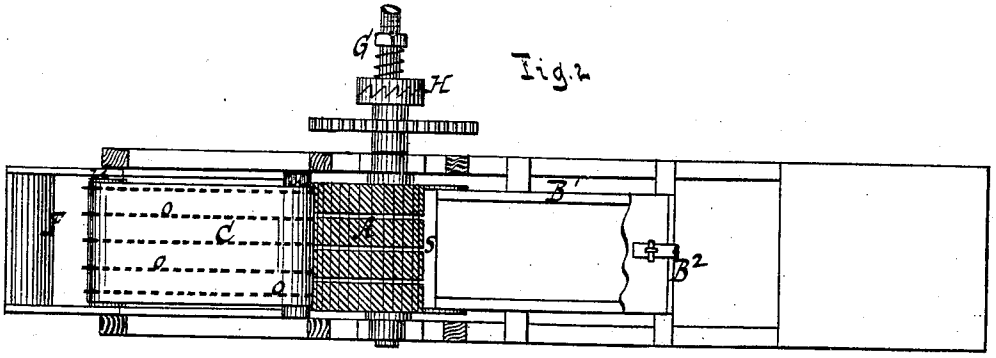
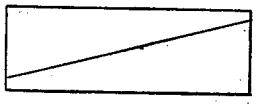


Fig. 3.



Fig. 4.



Witnesses
William Miller
Otto Knefeland

Inventor
Gustav L. Jaeger.
by Van Santvoord & Hauff
his Att'ys

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

GUSTAV L. JAEGER, OF NEW YORK, N. Y.

COMPACTING PAPER-STOCK AND OTHER VEGETABLE FIBERS FOR TRANSPORTATION.

SPECIFICATION forming part of Letters Patent No. 254,326, dated February 28, 1882.

Application filed December 31, 1881. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV L. JAEGER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Compacting Paper-Stock and other Vegetable Fibers for Transportation, of which the following is a specification.

This invention consists in a package of vegetable fibers produced by compacting said fibers while in a moist state and then drying the packages so formed.

The machine which may be used for the purpose of compacting the fibers is illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section. Fig. 2 is a horizontal section. Fig. 3 is a longitudinal section of the package when ready formed. Fig. 4 illustrates the method of putting up my packages for transportation.

Similar letters indicate corresponding parts.

In the drawings, the letters A B designate two rollers arranged to revolve in superficial contact with each other.

B′ indicates a receiver having its mouth arranged opposite to the line of contact of the rollers.

C is an endless feeder, armed with teeth *o*, for delivering the fibers to the rollers, and D an adjustable clearing-fork having its tines arranged above the endless feeder. The lower roller, A, is mounted in fixed bearings and the upper roller, B, in movable bearings allowing it to yield, the same being depressed upon the lower roller by a weighted lever, E, or other suitable means.

The receiver B′ consists of a box or trunk, and is preferably furnished with "doctors" *s*, impinging against the rollers A B for stripping the fibers therefrom. If desired, the edges of these doctors may be serrated to catch in grooves formed in the rollers, as indicated in Fig. 2. At its outer or rear end the receiver B′ is provided with a cover, B^2, which is arranged so that it can be opened for the removal of the packages.

The endless feeder C consists of an apron or chain traveling in the proper direction on rollers *u*, and it is arranged in a hopper, F, in an inclined position, so that by placing the fibers into the latter they are caught by the teeth of the feeder.

The clearing-fork D is secured to a rock-shaft, *v*, provided with a handle, *x*, for turning and locking it in the desired position, and by simply turning said rock-shaft the tines of the fork can be adjusted toward or away from the feeder.

The hopper F is arranged in the proper relation to a wood-pulping machine, and as the wood is ground the fibers which are fit for pulp are dumped in their moist state into said hopper, whence they are carried up by the feeder C. The surplus fibers are caught by the fork D and detained or thrown back, so that only a given quantity is delivered to the rollers A B and the danger of choking is avoided. By the action of the rollers the fibers are freed from a large portion of the moisture and then they are forced into the receiver B′, so as to be compacted therein, and thus be brought into the condition of a solid mass.

In order to avoid any strain to the machine when the receiver has been filled to its entire capacity, I use a divided shaft, G, for imparting motion to the working parts, the sections of said shaft being united by a spring-supported clutch, H, which allows the driving-section to revolve independently of the other or driven section. This clutch H also acts as a signal to indicate when the receiver has become filled, because the parts of the clutch thereupon ride over each other, producing a rattling noise. After a sufficient quantity of fibers have been forced into the receiver to produce this effect the door B^2 of the receiver is opened and the solidified package is taken out and then dried, either in the open air or by artificial heat. By these means I am enabled to produce solid packages from wood fibers and to save more than one-half the present cost of transportation by reducing the weight and economizing space.

The receiver B′ is by preference made tapering in its longitudinal section, in order to facilitate the removal of its contents, and the packages, which take a corresponding shape, can be laid upon each other in reverse position, as shown in Fig. 4, to economize space in transportation.

In forming my packages I can use different means. For instance, instead of the stationary receiver a movable receiver may be employed, with a number of forms attached, so that when one form is filled it is automatically removed

and an empty one takes its place, similar to a brick-machine.

I do not wish to confine myself, therefore, to the exact mechanism hereinbefore described; neither do I claim in this present application the apparatus shown in the drawings, such forming the subject-matter of a separate application for a patent.

What I claim as new, and desire to secure by Letters Patent, is—

A package of vegetable fibers produced by compacting said fibers while in a moist state and then drying the packages so formed, substantially in the manner and for the purpose herein shown and described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

GUSTAV L. JAEGER. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.