(No Model.)

G. L. JAEGER.

MAKING PAPER PULP FROM STRAW, STALKS, AND OTHER FIBROUS MATERIAL.

No. 254,327. Patented Feb. 28, 1882.

Fig. 1.

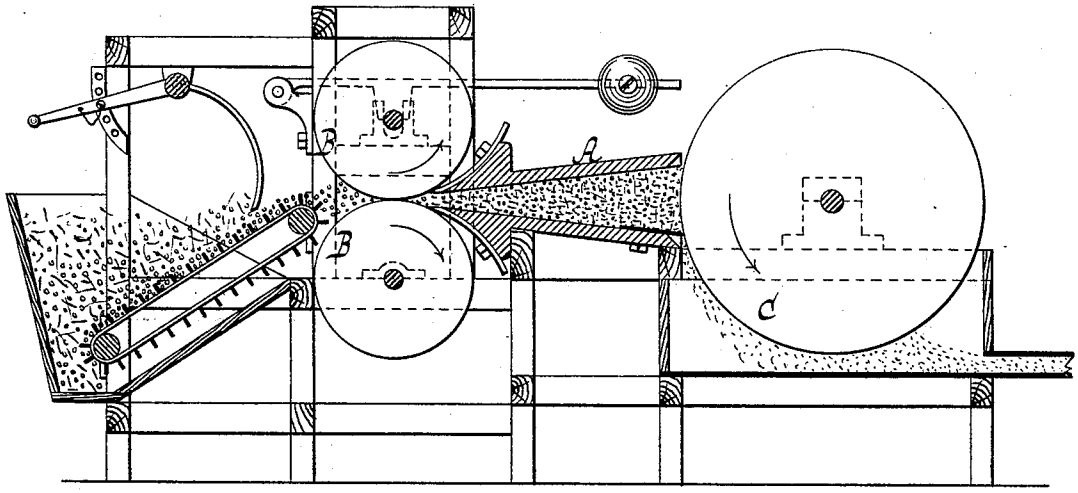
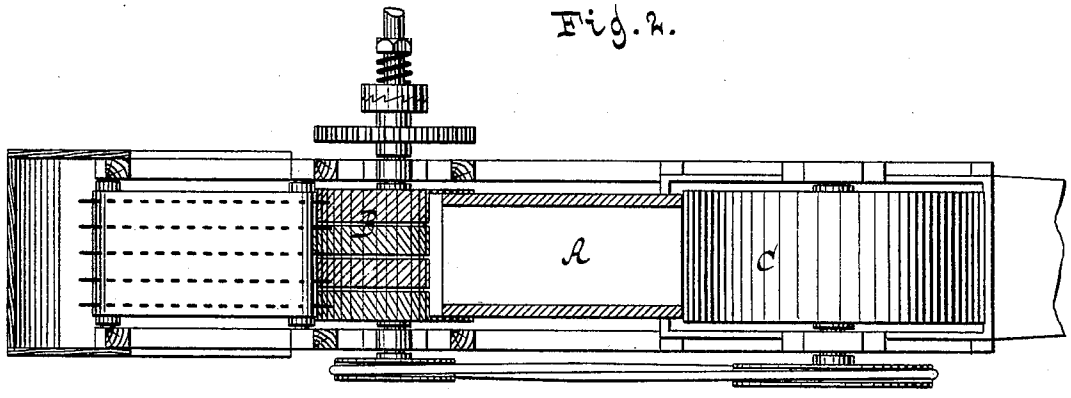


Fig. 2.



Witnesses.
Chas. Wahlers.
William Miller

Inventor.
Gustav L. Jaeger
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Attys.

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

UNITED STATES PATENT OFFICE.

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

MAKING PAPER-PULP FROM STRAW, STALKS, AND OTHER FIBROUS MATERIAL.

SPECIFICATION forming part of Letters Patent No. 254,327, dated February 28, 1882.

Application filed November 23, 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 Making Paper-Pulp from Straw, Stalks, and other Fibrous Material, of which the following is a specification.

This invention relates to the production of paper-pulp from straw and other stalks, or from vegetable fiber; and it consists in first compacting the stalks or fiber, to solidify the mass, and then subjecting the whole to a grinding action, thus disintegrating the same and reducing it to the desired state. When stalks are used I crush the same before they are compacted and ground.

In the accompanying drawings, Figure 1 shows a machine in vertical longitudinal section adapted to the purposes of my invention. Fig. 2 is a horizontal section thereof.

Similar letters indicate corresponding parts.

In carrying out my invention I compact a suitable quantity of the straw or other stalks or the fiber to be used, forming a solid block or package, and in this state subject the mass to a grinding action, whereby it is disintegrated or worn away and reduced to a pulp in a similar manner to the blocks of wood in wood-pulping machines.

Among other fiber adapted to be treated by my process is wood fiber, and especially that obtained in wood-pulping machines in a state too coarse or long to be used in paper-making, such fiber being usually wasted. A material economy is thus effected by my invention not only in the treatment of this wood fiber, but also other fiber at present unavailable in paper-making, as well as straw or other stalks which by the common process demand a lengthy and expensive treatment.

The receptacle for the stalks or fiber may consist of a box, A, and by feeding the substance into this box by means of rollers B it may be compacted therein and forced against a grinding-wheel, C, for its disintegration. If straw or other fibrous stalks are used, the rollers B serve to crush the same and then to feed the crushed stalks into the receptacle or box A, so that the grinding process is facilitated. The machine used, however, forms the subject-matter of a separate application for Letters Patent, and a detailed description thereof is therefore deemed unnecessary.

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

1. The process of producing paper-pulp from straw or other stalks which consists in first compacting the stalks and then subjecting the same to a grinding action, substantially as described.

2. The process of producing paper-pulp from straw or other stalks which consists in first crushing the stalks, then compacting the crushed stalks, and then subjecting the same to a grinding action.

3. The process of producing paper-pulp from vegetable fiber which consists in first compacting the fiber and then subjecting the same to a grinding action, substantially as 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.