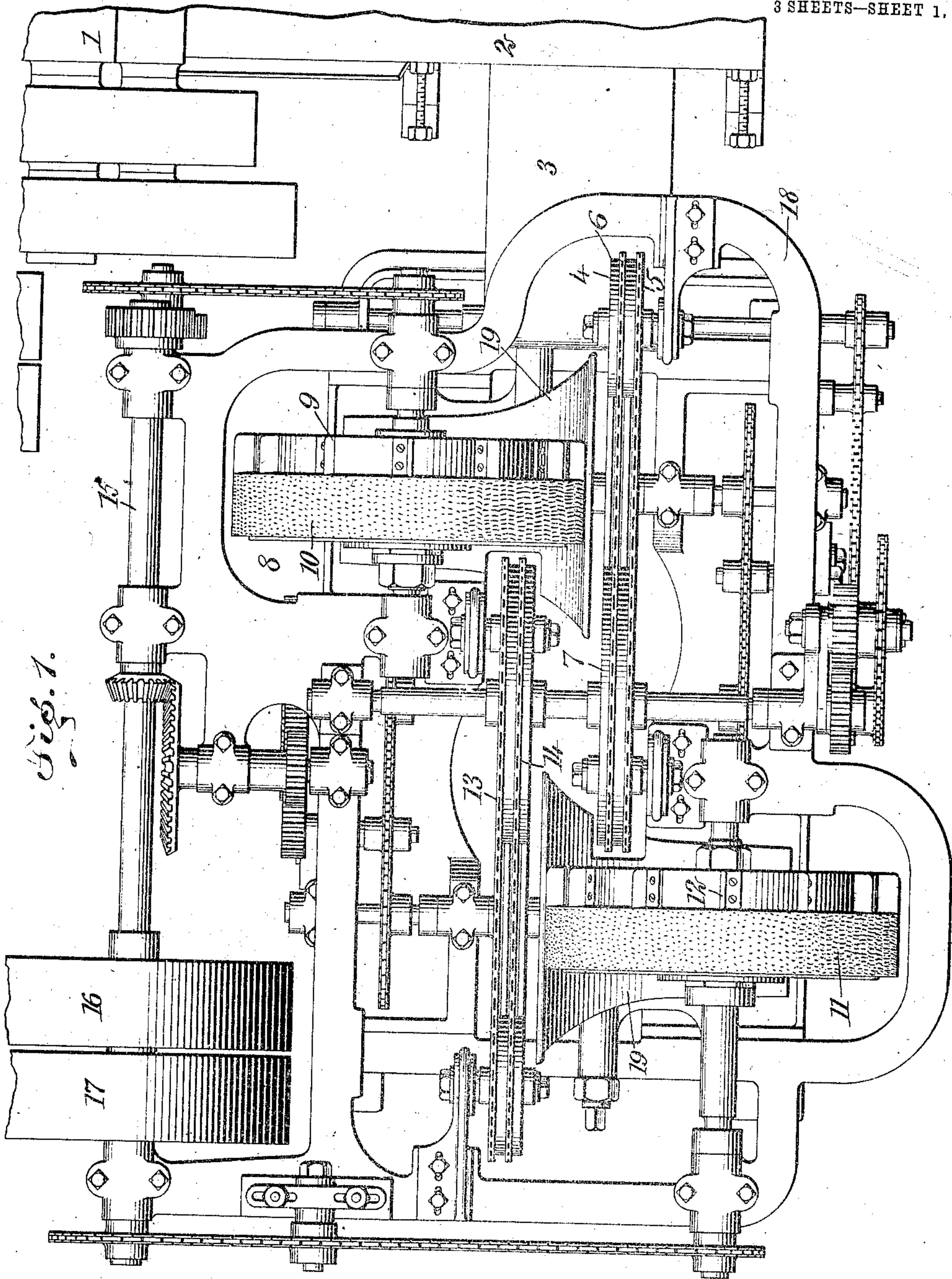


No. 859,755.

PATENTED JULY 9, 1907.

J. F. FARIAS.
FIBER CLEANING MACHINE.
APPLICATION FILED AUG. 30, 1906.

3 SHEETS—SHEET 1.



WITNESSES

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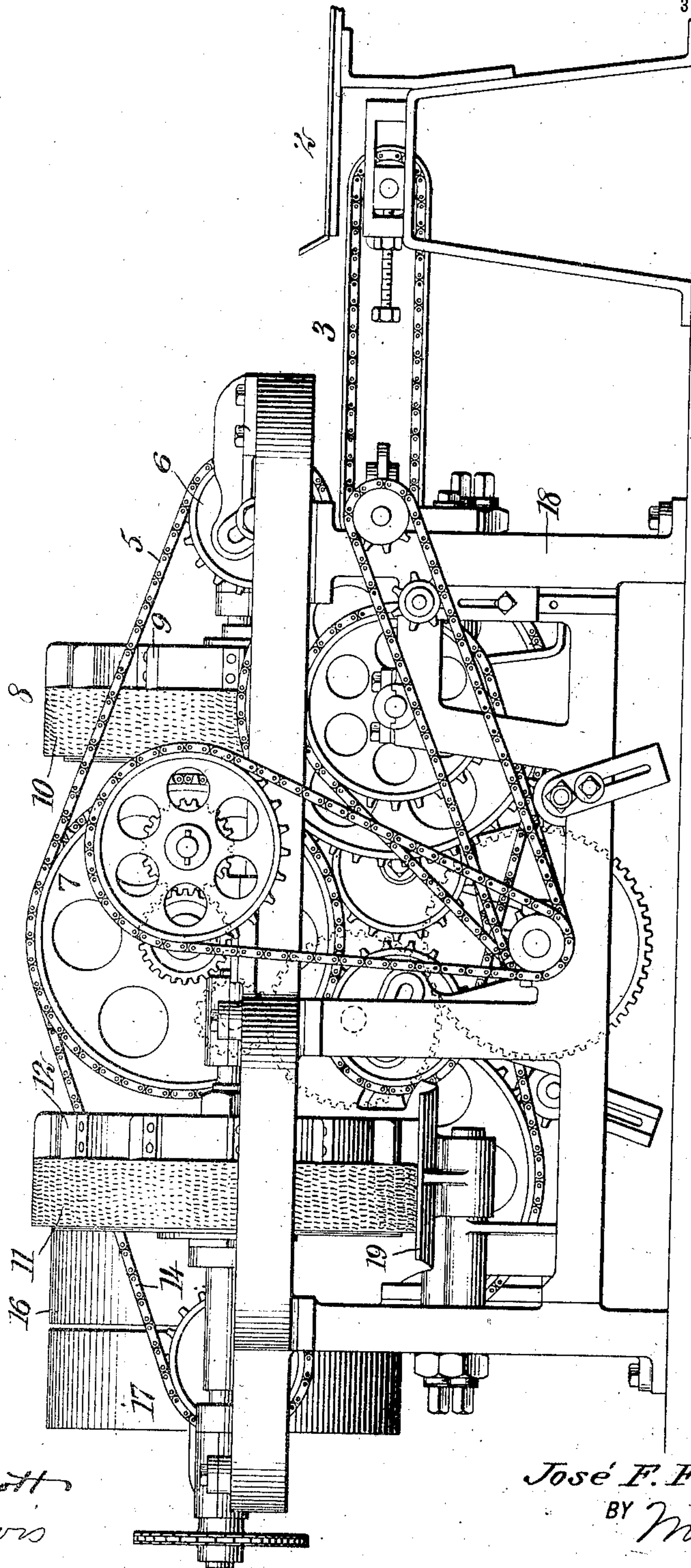
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3 SHEETS—SHEET 2.

Fig. 2.



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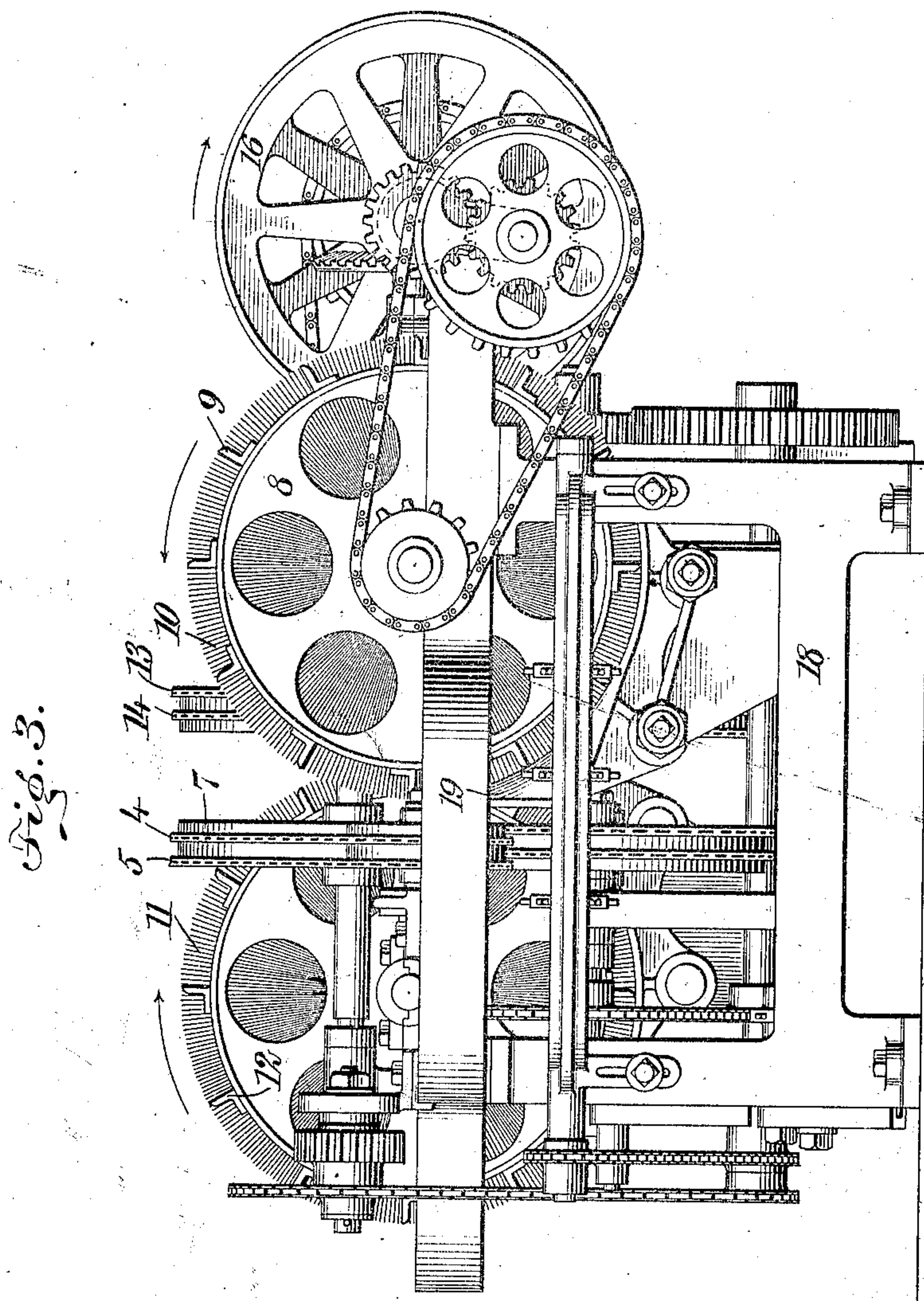
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3 SHEETS—SHEET 3.



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JOSÉ F. FARIAS, OF MONTEREY, MEXICO.

FIBER-CLEANING MACHINE.

No. 859,755.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed August 30, 1906. Serial No. 332,580.

To all whom it may concern:

Be it known that I, JOSÉ F. FARIAS, a citizen of the Republic of Mexico, and a resident of Monterey, Mexico, have invented a new and Improved Fiber-Cleaning Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in machines for removing the outer covering and pulp of fibrous material such as sisal, palma, lechuguilla and analogous plants, the object being to provide a machine for this purpose that will be simple in construction and by means of which the work may be rapidly carried on.

I will describe a fiber cleaning machine embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of a fiber cleaning machine embodying my invention; Fig. 2 is a side elevation thereof; and Fig. 3 is an end elevation.

In the machine the material is first passed through a series of crushing rollers 1, driven by any suitable means and then deposited on a horizontal plate or apron 2, from which the crushed material is manually transferred or pushed to the endless carrier 3, arranged at right angles to the apron 2; the endless carrier takes the crushed leaves to the gripping or conveying chains 4, 5; these are two lower and two upper chains, engaged alternatively and running on special sprockets 6, 7, with double lines of teeth; the spaces between said lines of teeth and at one side of them serve as a bed for the intervening chains to rest on; the leaves are bent in the shape of an "S" when gripped. While the chains 4, 5, carry the leaves by one end, the other end passes through the cleaning device, consisting of a wheel 8, with adjustable scraping blades 9, on the surface, and a wire wheel brush 10, next to it and mounted on the same shaft; the scraping blades and circular brush work against a shield 19 of segmental or curved form, provided, on the back, with a means for adjusting same in order to secure a perfect contact with the scraper and brush. When the leaves pass out of the first scraper and brush, the clean end is gripped by a second set of gripping chains 13, 14, before the other end is free from the first gripping chains 4, 5; when that end is free from the first chains it passes through a second scraper wheel 12, and circular brush 11, acting against their corresponding segmental shield. The middle portion of the leaves, cleaned by the first scraper and brush is also cleaned by the second scraper and brush, this being in order to insure a thorough cleaning of the whole length of the fibers. The several rotary parts are driven from a main shaft 15, on which is mounted a fast pulley 16, and a loose pulley 17, these several parts being mounted in a frame 18.

In the operation, the fibrous leaves are carried from the crushing rollers endwise along the apron 2, and then pushed or transferred manually to the endless carrier 3, from which they are fed between the first two pairs of gripping chains as above mentioned, and operated upon by the first scraping blades and brushes against the shield, which of course only cleans the covering and pulp from one end. The leaves are then carried, by their clean end, by the second two pairs of gripping chains to the second scraping blades and wire brushes to clean the covering and pulp from the opposite end.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. A device of the class described, comprising crushing mechanism, a receiving apron, an endless carrier running at right angles to the apron, a plurality of conveying devices each of said devices comprising upper and lower pairs of endless chains, the runs of one pair being in the same plane with the adjacent runs of the other pair and arranged in alternation therewith, one of said conveying devices being arranged to grip material by one end as it leaves the endless carrier, and the other of said devices being arranged to grasp the material by the other end as it leaves the first conveying device, and cleaning devices in the path of the material conveyed by said conveying devices, said cleaning devices each comprising a drum having a portion of the periphery thereof provided with an annular series of crushing blades, and another portion provided with an annular brush.

2. A device of the class described comprising crushing mechanism, a receiving apron, an endless carrier lying at right angles to the apron, a plurality of gripping or conveying devices, one of such devices being arranged to grasp the material by one end as it leaves the endless carrier and the other of said devices being arranged to grasp the material by the other end as it leaves the first of said conveying devices, and cleaning devices in the path of the material conveyed by the conveying devices, each of said devices comprising a drum having a portion of the periphery thereof provided with an annular series of crushing blades and another portion provided with an annular brush.

3. A device of the class described, comprising crushing mechanism, a receiving apron, an endless carrier running at right angles to the apron, gripping or conveying chains comprising upper and lower pairs of endless chains, the runs of one pair being in the same plane with the adjacent runs of the other pair and arranged in alternation therewith, and cleaning devices in the path of the material conveyed by the conveying chains, said devices comprising drums having a portion of the periphery thereof provided with an annular series of adjustable crushing blades and the other side with an annular brush.

4. A device of the class described comprising crushing mechanism, a receiving apron, an endless carrier running at right angles to the receiving apron, conveying means, and cleaning devices, said devices comprising drums having a portion of the periphery thereof provided with an annular series of adjustable crushing blades, and the other side with an annular brush.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSÉ F. FARIAS.

Witnesses:

ELIAS G. GARCIA,
JUAN E. RIVERA.