(No Model.)

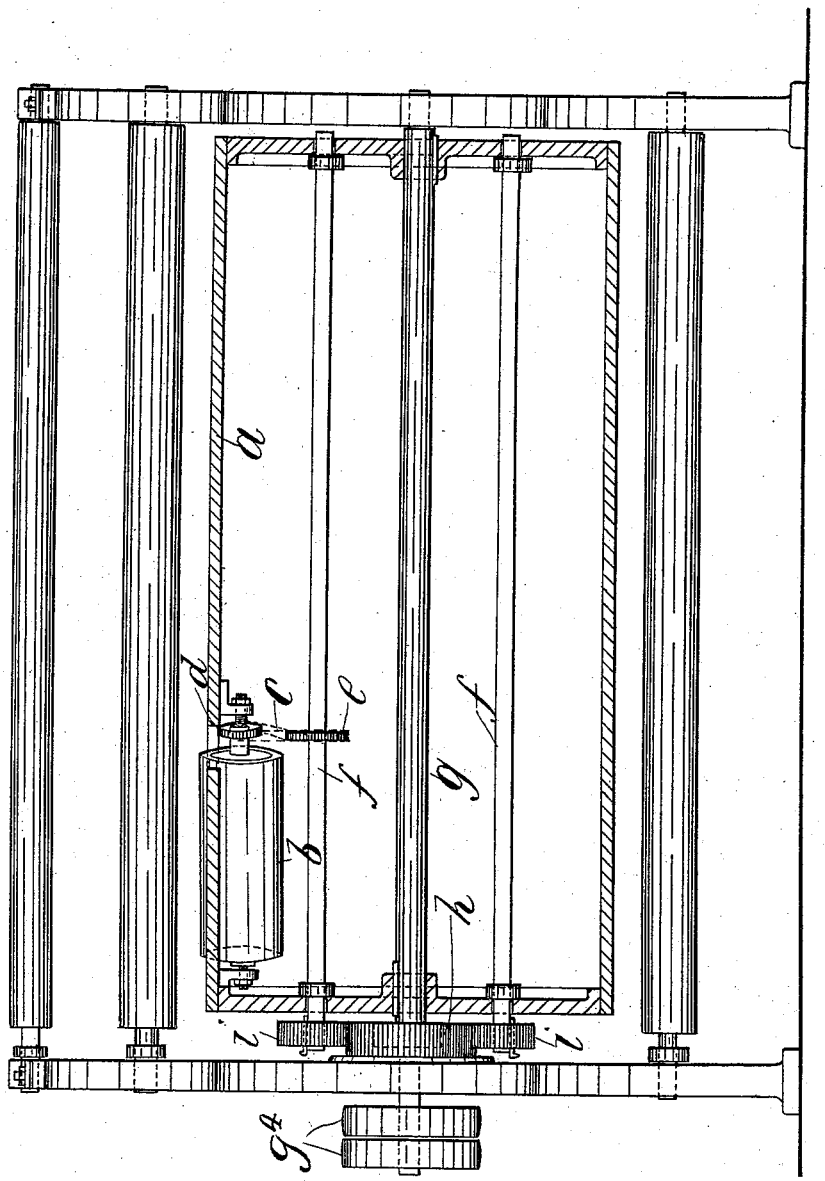
3 Sheets—Sheet 1.

E. SCHWEINEFLEISCH.

CLOTH NAPPING MACHINE.

No. 522,497. Patented July 3, 1894.

Fig. 1.



Witnesses
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G. W. Rea.

Inventor
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Atty.

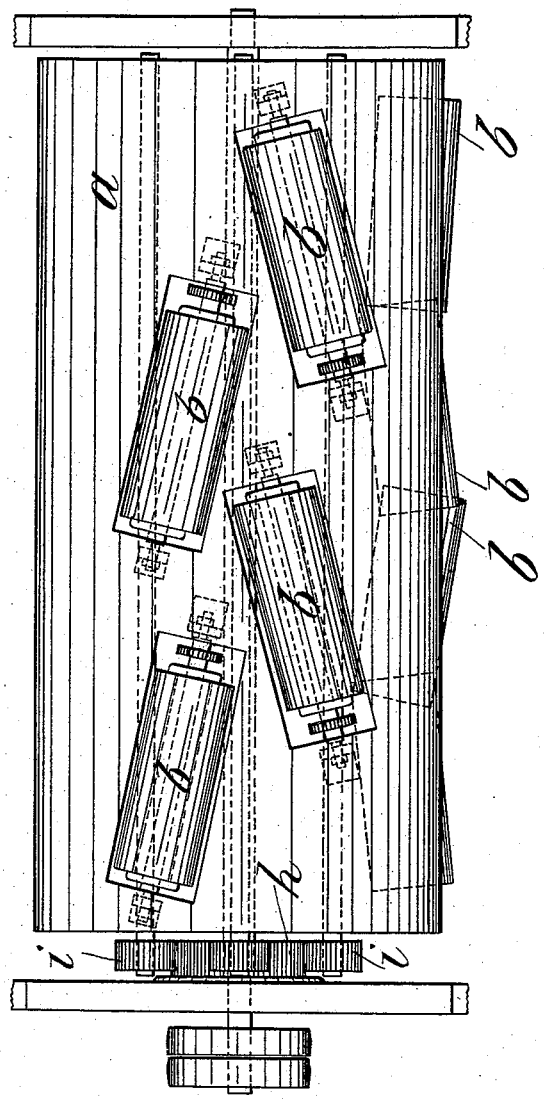
(No Model.) 3 Sheets—Sheet 2.

E. SCHWEINEFLEISCH.

CLOTH NAPPING MACHINE.

No. 522,497. Patented July 3, 1894.

Fig. II.



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(No Model.) 3 Sheets—Sheet 3.

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CLOTH NAPPING MACHINE.

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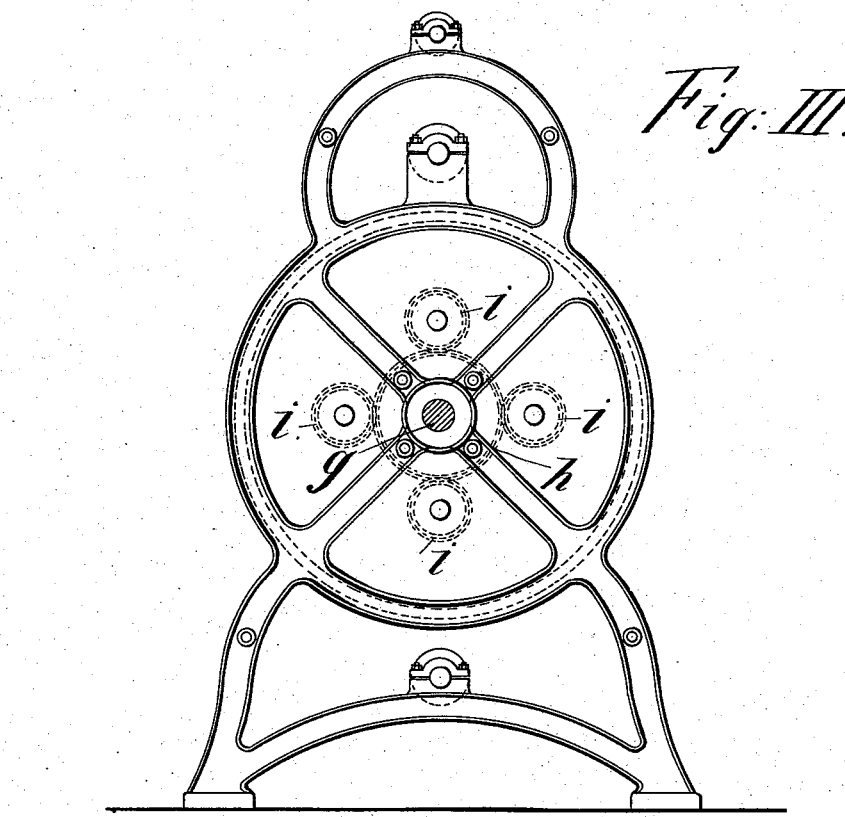
Fig. III.



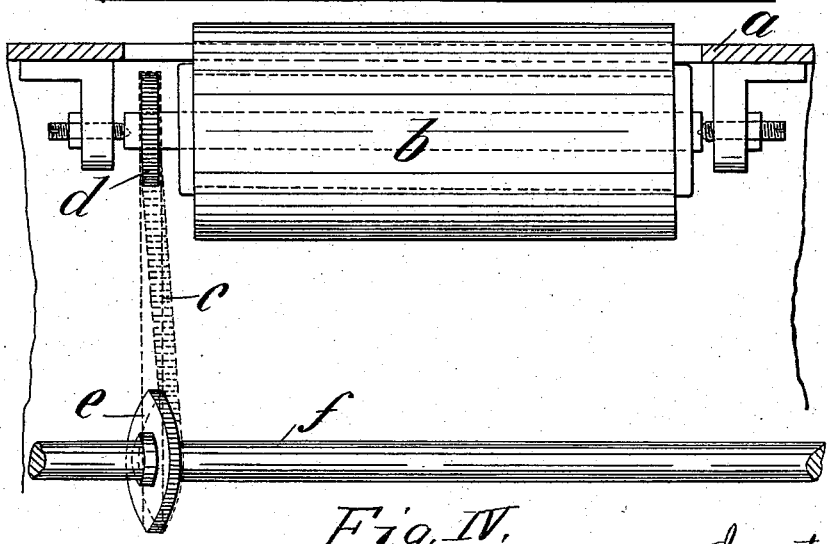


Fig. IV.

Witnesses.
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UNITED STATES PATENT OFFICE.

ERNST SCHWEINEFLEISCH, OF MÜLHAUSEN, GERMANY.

CLOTH-NAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 522,497, dated July 3, 1894.

Application filed December 29, 1893. Serial No. 495,086. (No model.) Patented in England November 15, 1893, No. 21,762; in Belgium November 30, 1893, No. 107,185; in Germany February 21, 1894; in France March 2, 1894, No. 234,699, and in Switzerland March 15, 1894, No. 7,596.

To all whom it may concern:

Be it known that I, ERNST SCHWEINEFLEISCH, a subject of the King of Prussia, residing at Mülhausen, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Cloth-Napping Machines, (for which I have obtained Letters Patent in Germany, dated February 21, 1894; in Belgium, dated November 30, 1893, No. 107,185; in England, by provisional patent, No. 21,762, dated November 15, 1893; in Switzerland, dated March 15, 1894, No. 7,596, and in France, dated March 2, 1894, No. 234,699,) of which the following is a specification.

This invention relates to cloth napping machines in which the periphery of the napping body is provided with a series of isolated diagonally arranged napping cylinders actuated by chain gearing from a series of shafts that are parallel with the axle of the napping body and geared therewith.

My invention consists in the construction and combination of parts in a napping machine, as hereinafter particularly described and claimed.

In the annexed drawings illustrating the invention—Figure 1 is a longitudinally sectional elevation of my improved napping machine. Fig. 2 is a plan of the same. Fig. 3 is an end elevation illustrating the driving-gear of the napping machine; and Fig. 4 is an enlarged longitudinal section of part of the machine showing the chain-gear of a napping cylinder.

In the periphery of the napping body or drum *a* are inserted the isolated and diagonally arranged napping cylinders *b* which are covered with card clothing and project through the wall of the napping body a sufficient distance to form a napping surface for contact with the articles to be napped. The driving of each napping cylinder *b* is effected by means of a chain *c*, and two chain-wheels *d* and *e*, one of which, as *d*, is fast on the axle or shaft of each napping cylinder while the wheel *e* is secured to one of a series of shafts *f* that are arranged parallel with and surrounding the central axle *g* of the napping body. The shafts *f* are rotated from a gear *h* on the axle *g*, which gear *h* meshes with pinions *i* on the several shafts. The manner of connecting the shafts *f* with the axles or shafts of the series of napping cylinders *b* through chain gearing, affords a certain and light running driving gear. The main axle *g* is provided with fast and loose pulleys g^4 for controlling the application of power to operate the rotary napping body and its several diagonally arranged napping cylinders, the arrangement of which is such as to present a constantly changing napping surface of large extent and efficient action.

What I claim as my invention is—

The herein described napping machine, consisting of the rotary drum or napping body *a* having a central axle or shaft *g* provided with the gear *h*, the series of shafts *f* arranged in said drum around and parallel with its central shaft and having pinions *i* meshing with the gear *h*, and a series of isolated diagonally arranged napping cylinders *b* projecting through the periphery of the rotary drum or napping body and each having its shaft or axle connected with one of the shafts *f* by chain gearing, substantially as described.

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

ERNST SCHWEINEFLEISCH.

Witnesses:

WILHELM BINDEWALD,

P. TEICHMANN.