

No. 778,102.

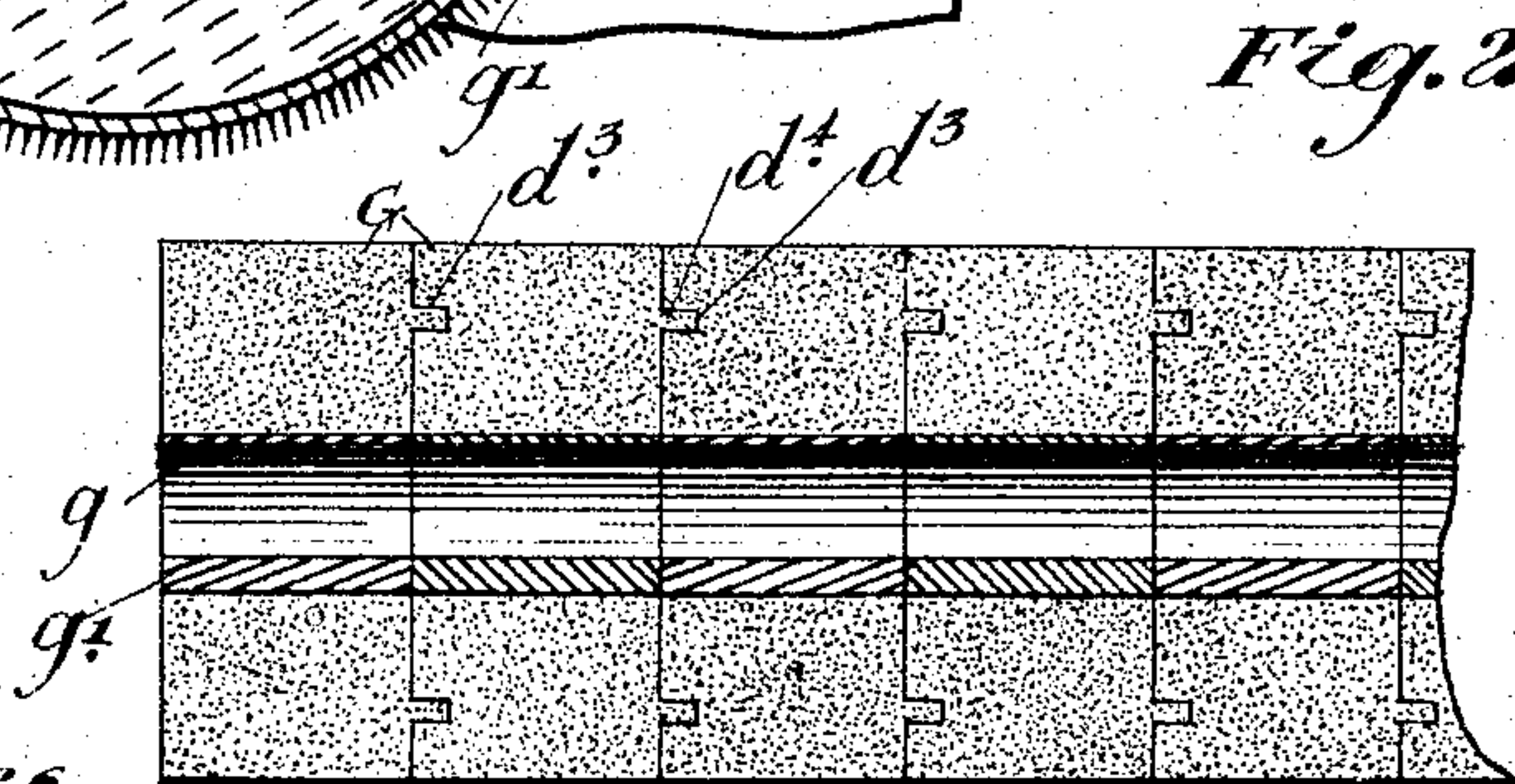
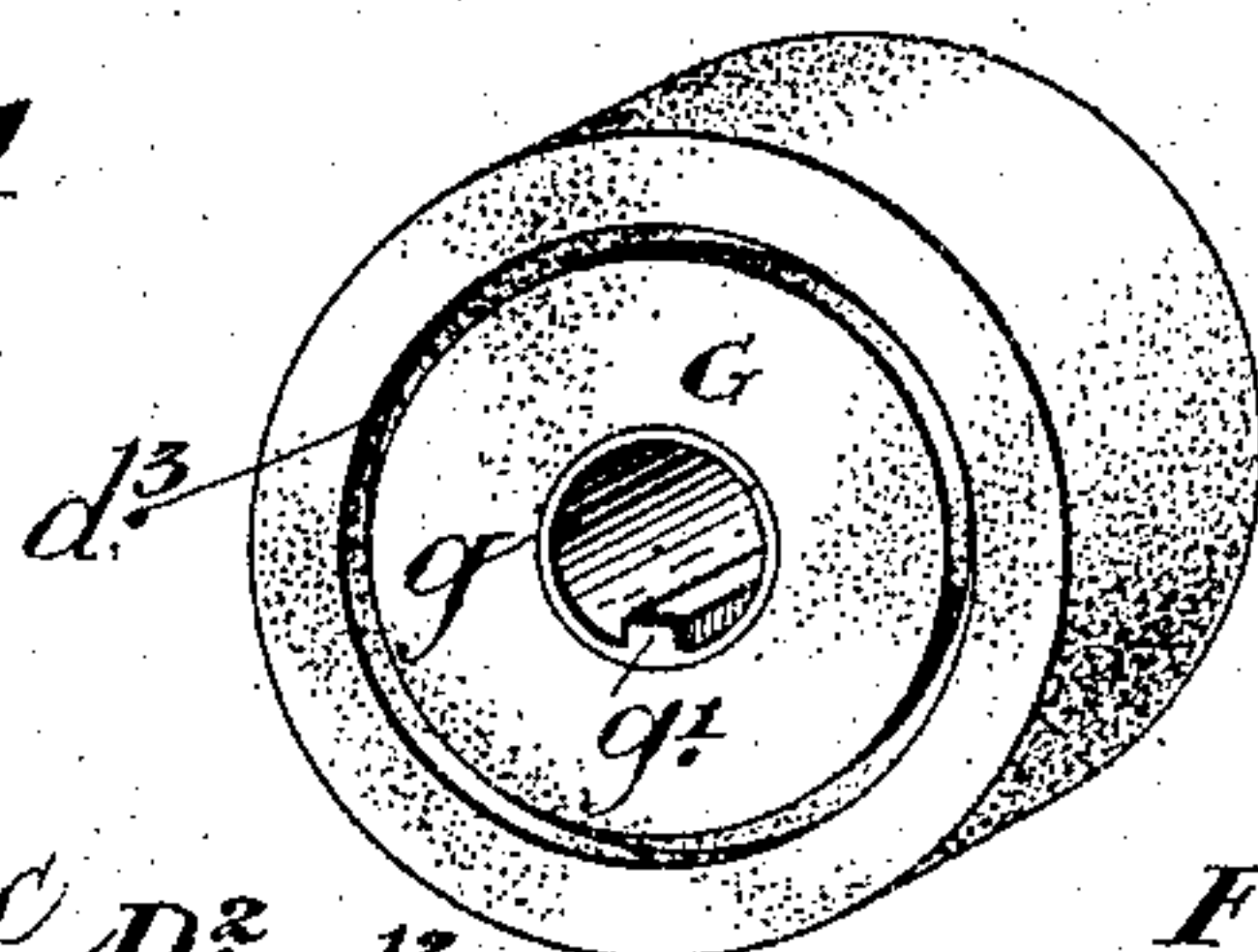
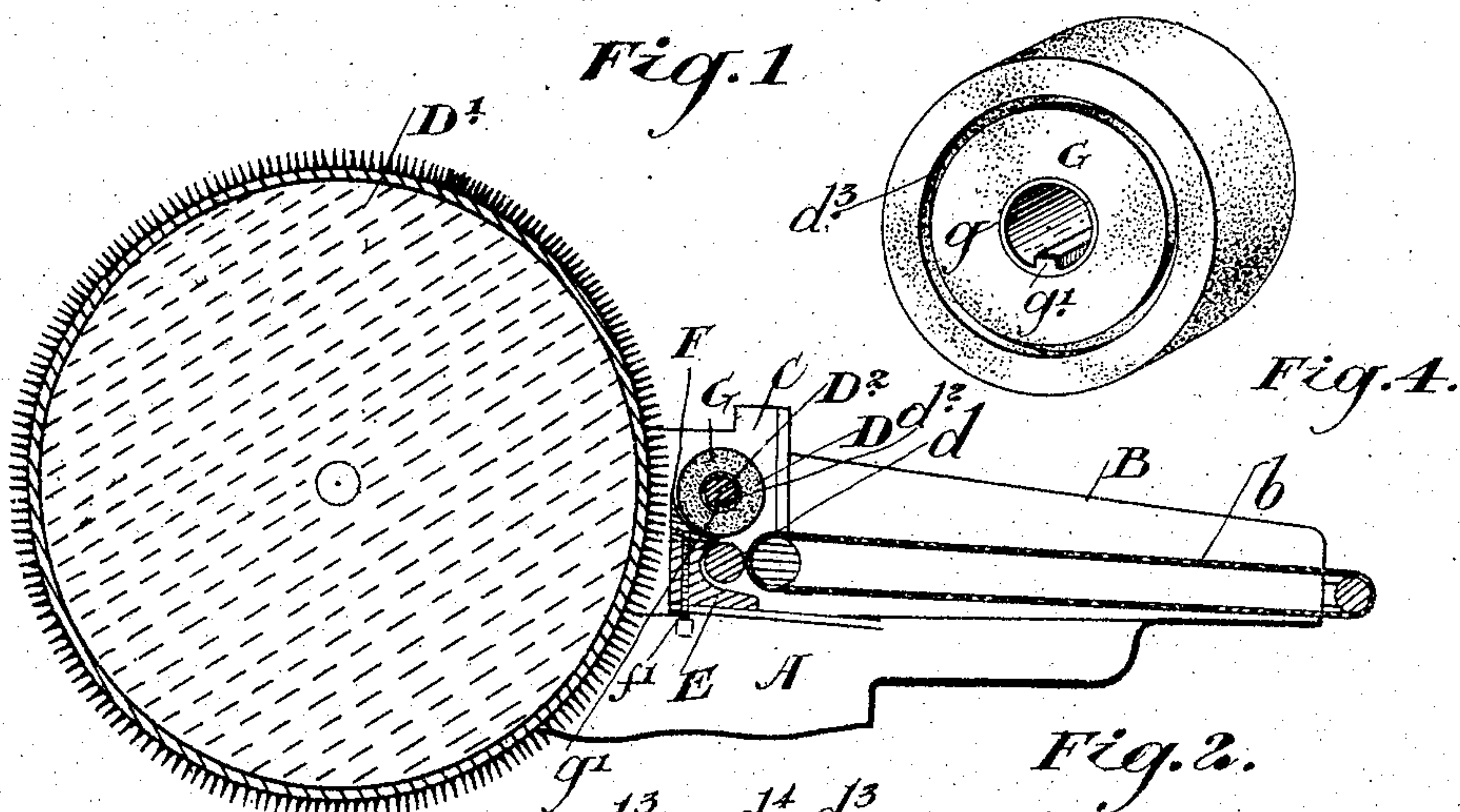
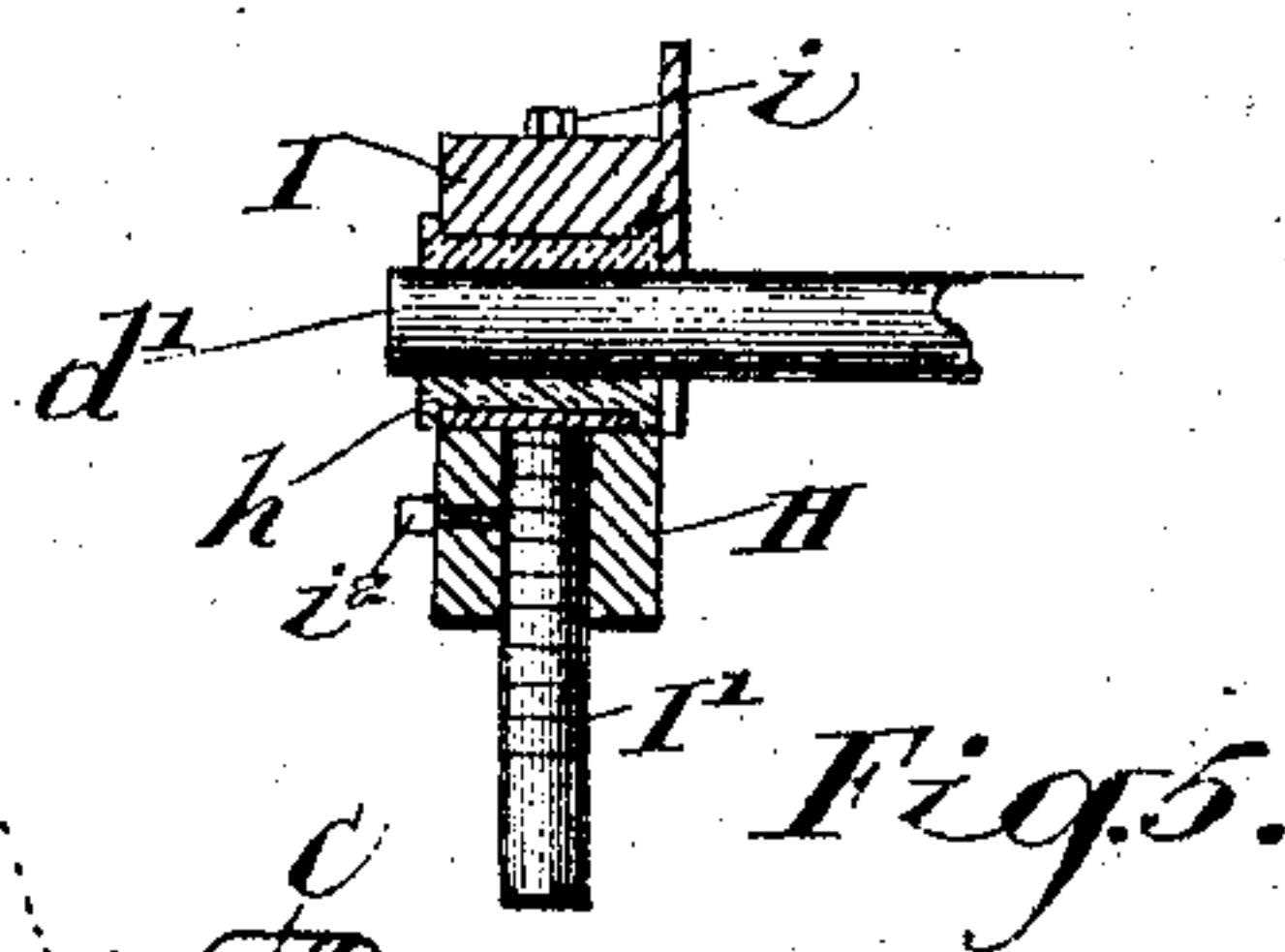
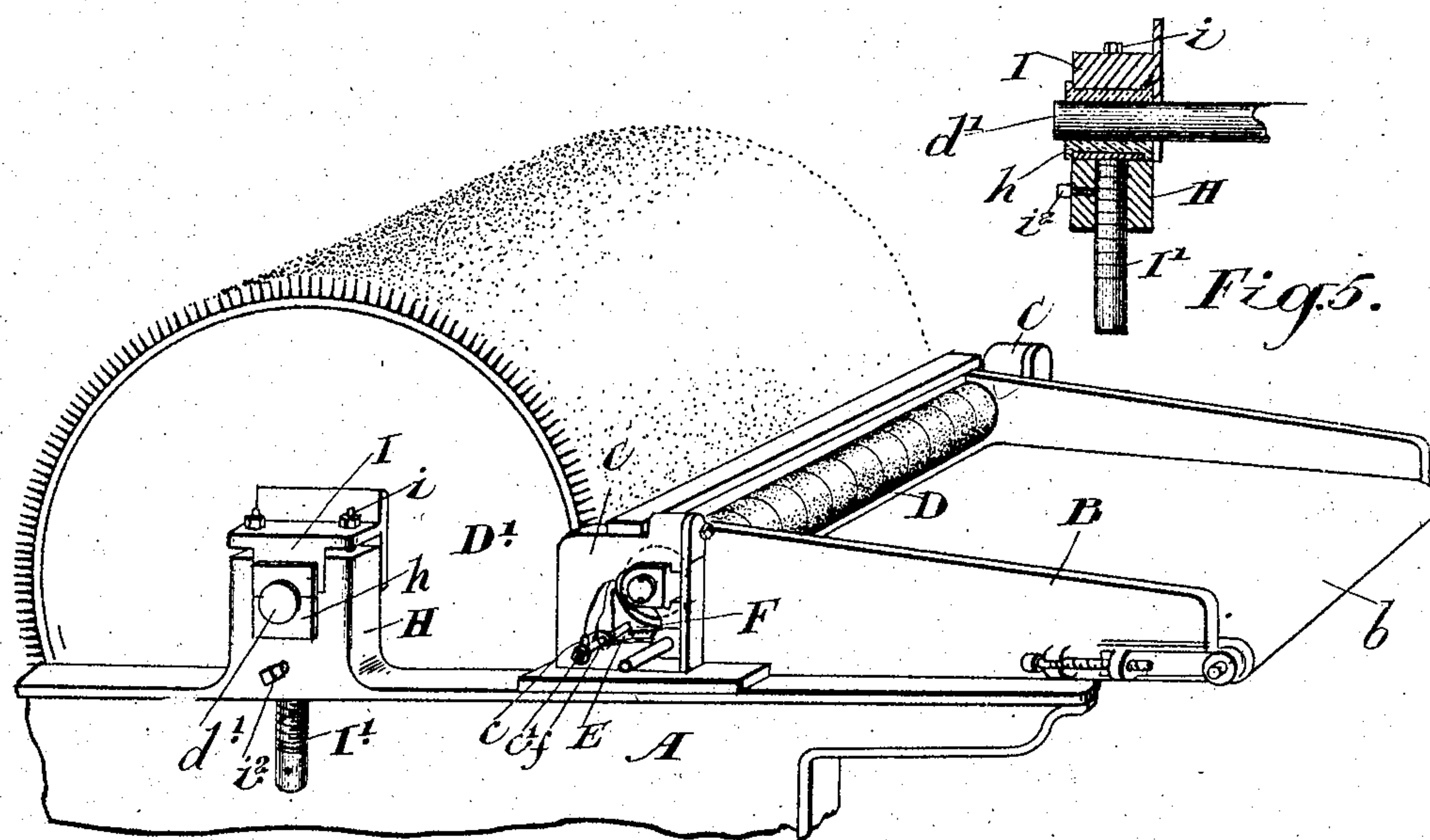
PATENTED DEC. 20, 1904.

L. BREDANNAZ & P. J. FOLLIN.

RAG PICKER.

APPLICATION FILED OCT. 14, 1902.

NO MODEL.



Witnesses.

A. S. Young.
R. Shielob

Fig 3

Inventors.

L. Bredannay
P. J. Lollin.
Superintendent
St. Louis Land and Cattle Co.

UNITED STATES PATENT OFFICE.

LOUIS BREDANNAZ, OF TORONTO, CANADA, AND PAUL JULES FOLLIN,
OF LISIEUX, FRANCE.

RAG-PICKER.

SPECIFICATION forming part of Letters Patent No. 778,102, dated December 20, 1904.

Application filed October 14, 1902. Serial No. 127,248.

To all whom it may concern:

Be it known that we, LOUIS BREDANNAZ, machinist, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, and PAUL JULES FOLLIN, engineer, of the city of Lisieux, in the Department of Calvados, France, have invented certain new and useful Improvements in Rag-Pickers, of which the following is a specification.

Our invention relates to improvements in rag-pickers; and the object of the invention is to devise a machine of this class which will produce a superior grade of shoddy without the necessity of passing the product through a subsequent machine, and subsidiary objects are, first, to provide an effective means of holding the stock to be picked, and, secondly, to provide a means for adjusting the shell of a feed-roller and cylinder so as to overcome the effect of the wear upon the shell; and it consists, essentially, of a shell-plate adjustably held beneath and to the rear of the feed-roller and a picker-cylinder supported on adjustable bearings, as hereinafter more particularly explained.

Figure 1 is a perspective view of the front portion of a rag-picking machine. Fig. 2 is a longitudinal section through Fig. 1. Fig. 3 is an enlarged longitudinal sectional view through a portion of the covering of the feed-rollers. Fig. 4 is an enlarged detail of one of the sections of the covering of the feed-rollers. Fig. 5 is a cross-sectional view of the adjustable bearing of the cylinder.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the main frame of the machine.

B is the receiving-table, provided with a conveyor b .

C C are bearing-brackets formed on the main frame of the machine.

D is the feed-roller, and d is the auxiliary roller.

D' is the cylinder, supported in suitable bearings hereinafter described.

E is a cross-bar of the frame A.

F is the shell, pivotally supported in a longitudinal axis by bolts f , secured in the slots c by nuts c' .

f' represents adjusting-bolts which pass up through the bar E against the lower face of the shell F. (See Fig. 2.)

H is a standard forming part of the main frame of the machine.

h represents brasses set in the standard H, in which the central spindle d' of the cylinder D' is journaled.

I is an adjustable cap secured to the top of the standard by bolts i' .

I' is a screw-rod designed to abut the under side of the brasses and adjust the position of the spindle d' vertically.

i^2 is a set-screw for holding the screw-rod I' from rotation. It will of course be understood that a similar bearing is used for the opposite side of the spindle d' .

In machines of this class hitherto used the shell-plate and knife of the feed-roller become worn and allow pieces of rag to pass onto the picker without being picked, and the knife becomes useless and has to be replaced. In order to provide against this, we lower the cylinder D' on its bearings in proportion to the wear of the shell-plate and knife. When, however, the shell-plate and knife have become so worn as not to admit of the cylinder being lowered further, we remove the shell-plate, reface it, and adjust it in position by means of the screw-bolts f' , and the cylinder D' is again brought back to its original position. It will also be seen that by using an adjustable face-plate that portion only will have to be renewed when worn out. Hitherto the whole portion to which the shell-plate is connected had to be renewed, thereby entailing a great expense.

The feed-roller D is composed of a central spindle D^2 , provided with a keyway d^2 , and rubber annular sections G, provided with a central annular metal core g , having a feather-way g' formed on its interior periphery. The feather g' is designed to enter the keyway d^2 , and thereby prevent the rotation of the sections upon the spindle. It also admits of a section being easily removed and replaced by a new one when it becomes worn.

d^3 is an annular groove formed in one side of each section, and d^4 is an annular tongue

formed upon the opposite side of the section. These sections are connected together, and each tongue d^4 is designed to fit into the corresponding groove in the adjacent section.

5 By this construction we obtain sectional covering having equal resiliency throughout.

In feed-rollers hitherto used the sections not only become loose, and therefore do not feed the rags, but have a tendency to give at the edges of the sections and allow pieces of cloth to pass onto the picking-cylinder. By forming our tongue-and-groove connections between the sections we form a support for the edges of the sections and make the resistance of the covering equal throughout, and thus prevent pieces of cloth being drawn onto the picking-cylinder without being picked.

It will be seen from this description that we have constructed a much cheaper machine and one which will do its work with much more efficiency than has before been accomplished.

In our machine as above described it will be seen that on account of the position of the roller and shell-plate in relation to the cylinder and each other the shoddy fed to the cylinder is held in position to be picked close to the teeth on the periphery of the cylinder instead of as in former machines, where two rollers were employed, one above the other, and the stock passed between them and was necessarily held or gripped at a comparatively much greater distance from the cylinder and teeth thereof. It will thus be seen in our machine that we are enabled to use an inferior or short grade of stock, which it has been found impossible to do in other machines as at present constructed, and the result produced is superior to that heretofore known in the art.

What we claim as our invention is—

1. In a device of the class described, the combination with the feed-roller and cylinder and cross-bar located in proximity to the cylinder and beneath the feed-roller, and an auxiliary roller fitted in a recess in the cross-bar, of the shell-plate, and means for adjusting the position of said plate in relation to the feed-roller and cylinder as specified.

2. In a device of the class described, the combination with the feed-roller and cylinder and cross-bar located in proximity to the cylinder and beneath the feed-roller, and an auxiliary roller fitted in a recess in the cross-bar, of the shell-plate, and pins or bolts extending through the cross-bar and designed to support and adjust the position of the said plate on its longitudinal axis in relation to the feed-roller and spindle as specified.

3. In a device of the class described, the combination with the feed-roller and cylinder and cross-bar located in proximity to the cylinder and beneath the feed-roller, and an auxiliary roller fitting in the recess in the cross-bar of the shell-plate, pins or bolts extending through a slot to each side of the machine designed to support the said plate on its longitudinal axis and means for adjusting the position of said plate in relation to the feed-roller and cylinder as specified.

4. In a device of the class described the combination with the feed-roller and cylinder, of a shell-plate suitably supported at each end and adjusting-bolts designed to pass up through a suitable portion of the frame and to abut the bottom of the shell-plate as and for the purpose specified.

5. In a device of the class described the combination with a frame, a cross-bar thereon and feed-roller and cylinder, of a shell-plate, pins or bolts extending through a slot to each side of the machine and designed to support the said plate on its longitudinal axis and adjusting-bolts designed to pass up through the cross-bar of the frame and abut the bottom of the said plate as and for the purpose specified.

LOUIS BREDANNAZ.
PAUL JULES FOLLIN.

Witnesses to the signature of Louis Bredannaz:

M. McLAREN,
E. B. SHEFFIELD.

Witnesses to the signature of Paul Jules Follin:

EMILE GRIMONT,
RICHARD BAYER.