No. 625,995.

Patented May 30, 1899.

J. WEEKS.

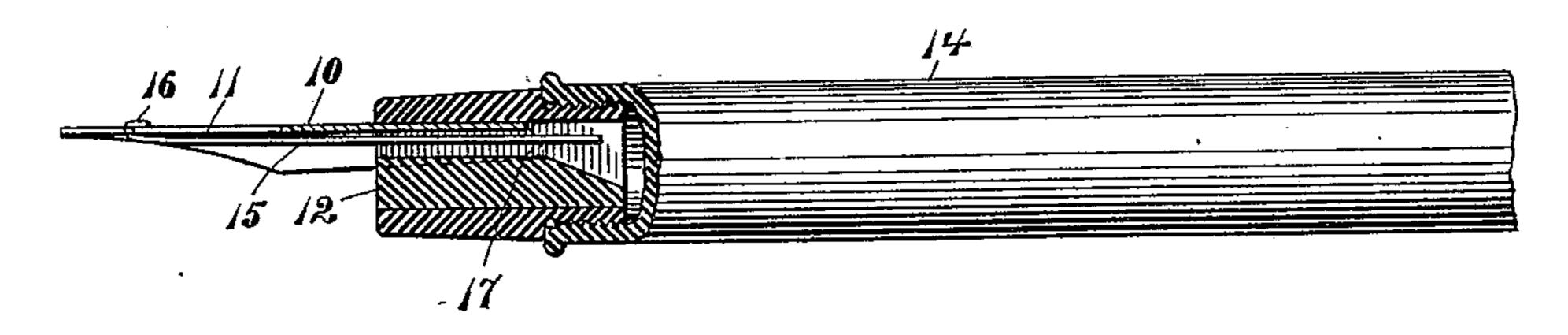
PEN.

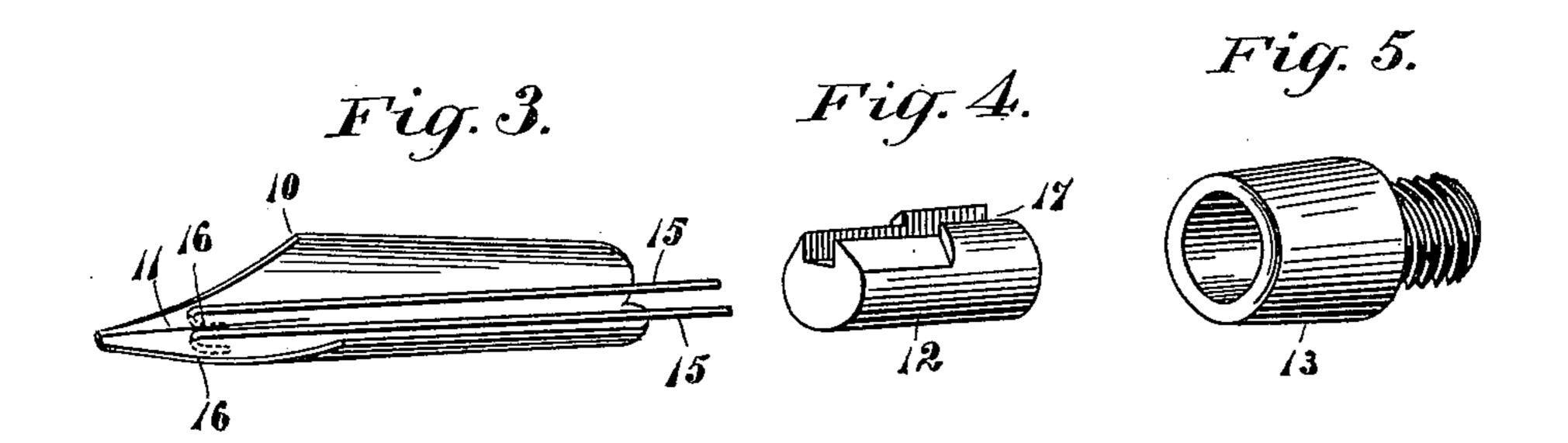
(Application filed Apr. 2, 1898.)

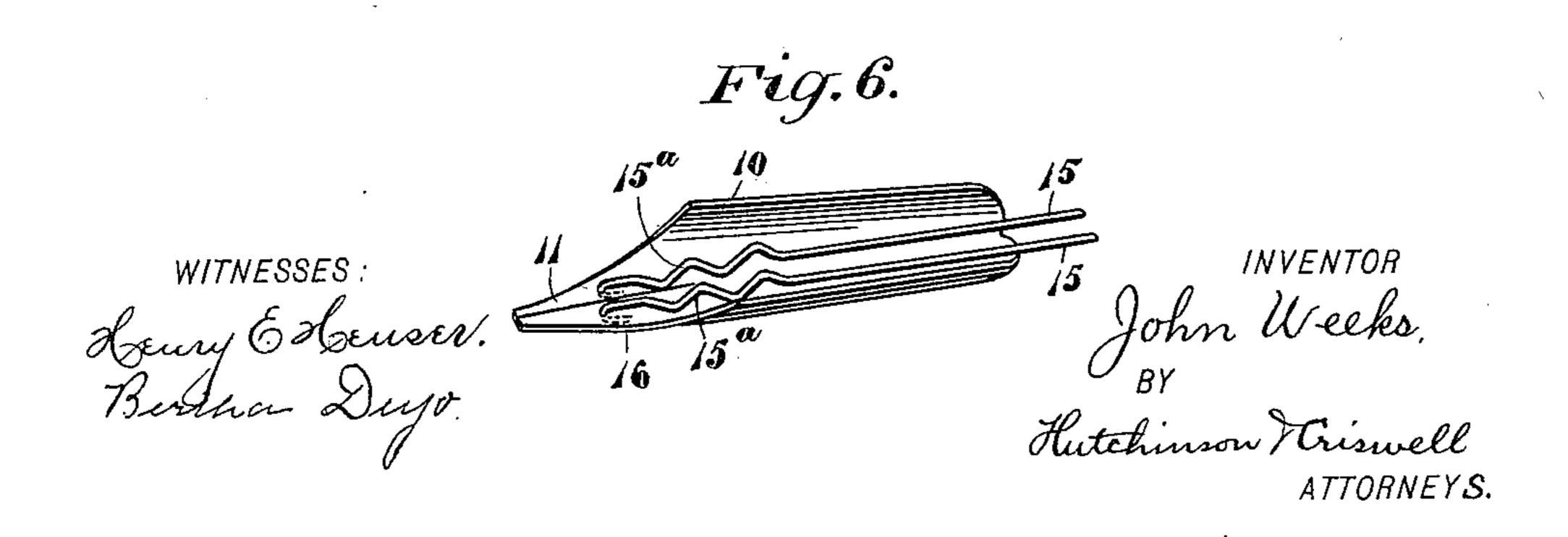
(No Model.)



Fig. 2.







United States Patent Office.

JOHN WEEKS, OF NEW YORK, N. Y., ASSIGNOR OF THREE-FOURTHS TO JOHN H. MORCH, OF SAME PLACE.

PEN.

SPECIFICATION forming part of Letters Patent No. 625,995, dated May 30, 1899.

Application filed April 2, 1898. Serial No. 676,227. (No model.)

To all whom it may concern:

Be it known that I, John Weeks, of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pens, of which the following is a full, clear, and exact description.

My invention relates to improvements in pens, and more especially to that class of pens used in connection with a fountain or relatively permanent source of supply. A difficulty with fountain-pens is that owing to various changes of temperature or the fact that they are used more or less frequently the flow of ink is apt to be irregular, sometimes running too freely and at other times scarcely flowing at all.

The object of my invention is to produce an extremely simple means of agitating the ink as it flows to the pen and directing the same to the pen-point, so that under any conditions to which the pen may be subjected the ink will always flow so long as there is any in the fountain.

Another object of my invention is to make the device as cheap and simple as possible to the end that the cost of the pen may not be

materially increased.

With these ends in view my invention consists of a pen and attachments the construction and arrangement of which will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate

35 corresponding parts in all the views.

Figure 1 is a side elevation of a fountainpen, embodying my invention. Fig. 2 is a
broken enlarged side elevation with a part
broken away and shown in section. Fig. 3

o is an inverted perspective view of a pen, showing my improvements. Fig. 4 is a detail view
of the plug and ink-channel of an ordinary
fountain-pen. Fig. 5 is a perspective view
of the nipple in which the plug is held, and
Fig. 6 is an inverted perspective of a slightlymodified form of my invention.

The body or fountain portion of the fountain-pen may be of any usual kind, and the plug can be of any of the ordinary makes, the drawings simply illustrating a well-known

form and showing, as in Figs. 4 and 5, the

plug and nipple in detail merely to better illustrate the use of my particular improvement.

It will be clearly understood from the description to follow that my invention can be used with any fountain-pen in use or likely to be constructed, as the only necessary things to render the penholder and fountain capable of use with my invention are means for hold-for the pen and a channel for the flow of ink

to the pen.

The pen 10 may in its general features be of any usual kind or description, and the drawings illustrate the usual type of pen 65 having the split point 11. This pen is shown in connection with the customary plug 12, nipple 13, and fountain or holder 14; but, as above remarked, these accessories may be changed as desired without affecting the in- 7° vention. The gist of the invention is embodied in the agitators 15, which, as shown in Figs. 2 and 3, comprise two parallel wires running longitudinally of the pen and free from the body portion thereof, except at the 75 points where the wires are attached to the pen, which, as illustrated, is accomplished by forcing the ends of the wires through holes in the pen and then doubling the wires on themselves, as shown at 16. This connection 80 between the wires and the pen-point may be either tight or loose, the only necessary thing being that the agitators be held at this point, and be held sufficiently tight to permit the vibrations of the pen to be transmitted to the 85 agitators. The connection between the agitators and pen is sufficiently near the point of the latter to cause the ordinary movements or vibrations of the pen in writing to be readily transmitted. These agitators are adapted to 90 extend into and preferably through the channel 17 of the plug 12, through which channel the ink flows to the pen. It will be noticed that one wire or agitator could be used without affecting the principle of the invention, 95 but two are preferably employed.

The shape of the agitators is not material, and they can be straight, as shown in Fig. 3, or can near the point of the pen be made of a zigzag shape, as shown at 15° in Fig. 6. Other 100 forms may be devised also without affecting

the invention in any way.

When the pen is in position in its holder, the agitators project through the channel 17 of the plug, as shown best in Fig. 2, and to this end the agitators are preferably a little 5 longer than the pen—that is, they project beyond the upper end of the pen. It is in this channel that the clogging, if any, is most likely to occur, and it will be readily seen that when the pen is used the agitators 15 will be 10 vibrated and the vibratory motion in the channel 17 will prevent any clogging, and even if there is no actual tendency to clog the ink flows readily along the wires or agitators 15 and so to the pen-point. Moreover, the ink by 15 following the agitators is delivered to the point of the pen ready for use, and there is not the usual liability of causing the pen to be badly fouled.

From the foregoing description it will be seen at once that the construction of the pen itself does not affect the invention, that the agitators may be of various shapes, that one or a plurality can be used, that the agitators serve also as an ink-guide, and that the invention is adapted for use with any form of fountain-pen.

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

1. The combination with a pen, of an agi- 30 tator fixed at one end only to the flexible part of the pen, the free body portions of the agi-tator lying essentially parallel with the pen so as to lie in the channel of a fountain-pen, whereby the vibrations of the pen-point will 35 be imparted to the agitator and ink substantially as described.

2. The combination with a fountain-pen having a discharge-channel, of a pen, and an agitator fixed at one end only to the flexible 40 part of the pen the free body portions of the agitator extending into the ink-channel essentially parallel with the pen so that the vibrations of the pen and agitator prevent clogging of the channel, substantially as described.

3. The combination with a fountain-pen having a discharge-channel, of a pen and an agitator, the latter comprising two members fixed to the flexible part of the pen on opposite sides of the pen-slit the body portions of 50 the agitators being free and essentially parallel with the pen and extending into the channel substantially as described.

JOHN WEEKS.

Witnesses:

JOHN H. MORCH,
FRANK J. BUTLER.