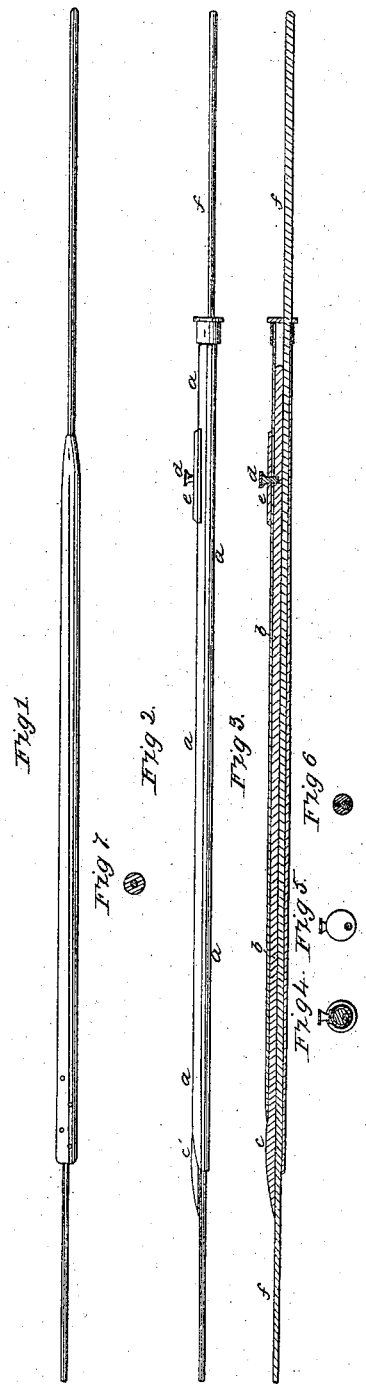
R. J. Dodd,

Catheter.

No. 3,297. Patented Oct. 6, 1843.



Witnesses:

Henry M. Parker
Wm. H. Crafts

Inventor:

R. J. Dodd

UNITED STATES PATENT OFFICE.

ROBERT J. DODD, OF PHILADELPHIA, PENNSYLVANIA.

BOUGIE FOR STRICTURES.

Specification of Letters Patent No. 3,297, dated October 6, 1843.

To all whom it may concern:

Be it known that I, ROBERT J. DODD, of Philadelphia, in the State of Pennsylvania, surgeon in the Navy of the United States and a native citizen of the United States, have invented an improved Catheter-Bougie, of which the following is a true and exact description.

The object of my improvement is to guide the bougie in inserting the same into the urethra for the purpose of removing a stricture and to prevent the lacerating of the urethra in inserting the bougie, and also to guide the cutting instrument used in removing the stricture, and to prevent its point from passing out of the urethra on one side in the operation.

In the annexed drawing, Figure 3, is a longitudinal section of my improved catheter-bougie, in which (*a*) is the dilator, being the same in size and exterior form as the bougie in common use as shown in Fig. 1. This dilator may be made of silver or any other suitable metal. This dilator is hollow through its whole length, the hollow being of sufficient capacity to admit of the guiding-rod and knife-bearer. The guiding-rod Fig. 3, *f*, is of steel or other suitable metal and traverses longitudinally in the dilator, being longer than the dilator so that it projects beyond the dilator at each end. In performing an operation for removing a stricture, the guiding-rod is protruded beyond the end of the dilator so as to pass up the urethra in advance of the dilator, and thus to guide the dilator in the urethra and prevent its end from pressing against and lacerating the wall of the urethra. The knife-bearer Fig. 3, *b*, is of steel or other suitable metal, the same being, as I usually make it, cylindrical in form and having a groove or channel or hollow on one side through its whole length for the guiding-rod to traverse in. Its particular form may be varied very much, as will be evident, without changing its principle or impairing its use. It is adapted on its hollow or grooved side to the guiding-rod and slides upon that rod, the whole instrument being so constructed that the knife-bearer and the guiding-rod are adapted to and fill up the interior hollow space in the dilator, in such manner, however, as to permit the rod and the knife-bearer, each of them separately to traverse or slide freely.

The knife, Fig. 3, *c*, is fixed in the knife-bearer so that when the knife-bearer is inserted into the dilator, the knife is retracted into a narrow slot on one side of the dilator at the end of the dilator. The knife is thus retracted and in effect sheathed in the dilator at the commencement of an operation with the instrument. It is evident that the knife-bearer must be inserted into the dilator at the end of the latter, where the slot is, that is at that end which is the entering end in an operation. At the other end of the knife-bearer is a thumb-screw (*d*) which is screwed into the knife-bearer; and the knife is worked by means of this thumb-screw. A longitudinal slot is made in the dilator of a half or three-quarters of an inch in length more or less, in which this screw traverses. This slot is covered by a thin sliding plate (*e*) which serves merely for a finish to the instrument, and has no essential function in the use of the instrument. The back of the knife is exactly adapted to the guiding-rod, and the point of the knife is just at the surface of the rod, so that when the knife is made to slide on the rod it cuts clean from the surface of the rod outward, leaving no undivided substance between the back of the knife and the rod. When the dilator is inserted into the urethra, with the knife retracted or sheathed as it always is in the commencement of the operation, and it is found in the process of the operation that a stricture is encountered, that cannot be removed by the dilator, the operator by means of the thumb-screw (*d*) pushes the knife forward and thus divides the strictured parts. The stricture being thus divided, the knife is again retracted or sheathed and the dilator again pushed forward. The dilator being thus inserted it may remain in the urethra as a catheter the guiding-rod being taken out.

An instrument may consist of the dilator and guiding-rod only, without the knife and knife-bearer; to be used in cases where it is not necessary to divide the stricture by a cutting instrument. Or in such a case the knife and knife-bearer may be taken out and the instrument used in an operation without them. The instrument may be used in op-

erations for other strictures than those of or in the urethra.

I claim as my invention and ask a patent for the said instrument, consisting of the dilator and guiding-rod merely, or consisting of the dilator, guiding-rod and knife and knife-bearer.

In testimony whereof, I, the said ROBERT J. DODD hereto subscribe my name in the presence of the witnesses whose names are hereto subscribed on the 18th day of September, A. D. 1843.

R. J. DODD.

Signed in our presence:
HENRY M. PARKER,
WM. A. CRAFTS.