acorn, here this form will do good work. The action of the electrolysis depends on the largest diameter of the bulb in these cases, and does most service on the withdrawal of the electrode when the operator feels best how much work should be done. It is also used when the stricture is near the meatus.

battery, conducting wires, sponge electrode, and a mille-ampère meter. The bougie à boule is a good instrument for examining the urethra and detecting strictures.

Details of the operation and further explanation of the electrodes may be found in "Ten Years' Experience in the Treatment of Stricture



3. The Tunnelled Electrode .-- These are in Nos. 9, 11, 14, 17, 20, 21, French. They are very important for bad, tortuous strictures and are to be used only by the expert operator. The curve is shorter and the egg-shaped bulb tunnelled so that it may be introduced over a filiform guide. They are on the principle of the tunnelled sound invented by Dr. J. W. S. Goulay, and were devised by me so that electrolysis and tunnelled sound could be used simul-Where the stricture was impassable taneously.

of the Urethra by Electrolysis," in the Medical Record, August 12 and 19, 1882, and "The Armamentarium for the Treatment of Urethral Strictures by Electrolysis," in the Medical Register, Philadelphia, 1887, but the following is a summary of general rules to be observed :

1. Any good galvanic battery will do which has small elements and is steady in its action; the 20-cell battery zinc and carbon elements is an excellent instrument and sufficient for the beginner.



Fig. 4. Combination Electrode.

with ordinary instruments this was used successfully, and passed through the stricture without the possibility of making false passages.

4. The Combination Electrode.-This is tunnelled electrode and catheter in one. It is an auxiliary electrode for extreme cases. Where a very tight stricture is complicated with retention of urine the indications are to remove the obstruction and draw off the water with one instrument. as the parts are too sensitive to tolerate the

2. The fluid for the battery ought not to be used too strong.

3. Auxiliary instruments are important to the expert, but not necessary for the beginner. However, a mille-ampère meter is desirable.

4. For the positive pole a carbon electrode is used, covered with sponge, moistened with hot water and held firmly against the cutaneous surface of the patient's hand, thigh, or abdomen, 5. For the absorption of the stricture the

	C.TIEMANN ACC		· ·
	G.TIEMANN & C		,
	Whalebone Bougie.	Filiform Guide.	1
introduction of two instrume	nts in succession.	negative pole must be used.	
Also the patient may be bend	efitted by washing	6. Electrode bougies are firm sounds, i	insu-
out the bladder, all of which	can be done with	lated with a hard baked mass of rubber.	The
one introduction of the instru	ment.	extremity is a bulb, egg-shaped, which is	the
The armamentarium is co	mpleted by a few	acting part in contact with the stricture.	· .

binding screws, some whalebone bougies, olivepointed whalebone filiform guides, a galvanic | curves are mistakes.

7. The curve of the electrode is short ; large

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