The standard ohm is the resistance offered by a column of mercury, 106 centimeters long and one millimeter in cross section, but there are many other ways of getting an ohm of resistance. For instance, 440 feet of telegraph wire made of galvanized iron offers a resistance of 1 ohm.

On the other hand, less than five feet of No. 33 pure copper wire gives a resistance of 1 ohm. I can demonstrate this with the amperemeter. I have here 19 feet of 33 wire, which should give a resistance of 4 ohms. I have also a Leclanche cell which has been weakened down by hard work to an electromotive force of 1 volt, the normal electromotive force being nearly one and a half. Now 1 volt through 1 ohm should give one ampere, or 1 volt through 4 ohms should give one-fourth of an ampere, and this is precisely what it gives by experiment.

No. 40 wire being much finer, the resistance which it offers is much greater; in fact, less than 1 foot of it offers a resistance of an ohm. Or to put it to the test, less than 4 feet should give 4 ohms or allow $\frac{1}{4}$ of an ampere to pass through. And this you see it does.

1 volt, through 1 ohm, gives 1 ampere; 60 volts through 60 ohms gives 1 ampere.

The human body gives a resistance of 50 to 200 ohms.

A 16 candle power incandescent lamp gives a resistance of 50 or 60 ohms.

Resistance depends on two things: on the nature of the conducting body interposed between the poles, being greatest in glass and least in copper; and secondly, resistance depends on the length and calibre of the conductor; the longer and smaller it is the greater will be the resistance, the shorter and thicker it is the smaller will be the resistance. Thus while it only takes less than a foot of the smallest size wire No. 40 to give an ohm, it would take over 20 thousand feet of the largest size No. 1000 to offer the same resistance.

On the resistance of different conductors is based ohms law, viz., that the intensity of a current is equal to the electromotive force divided by the resistance.

The ohm meter consists of a series of resistance coils of fine wire, of varying length and fineness, arranged with binding posts, so that the current can be thrown into a 10, 20, 100, 1000, or 10,000 coil and of different metals (such as German silver).

QUANTITY.

Ohm's law, as I have said, is that the electromotive force divided by the resistance equals the quantity. The quantity of current furnished by 1 volt of pressure through one ohm of resistance is called an ampere.

An ampere is too large a current to be used in medicine, so it has been divided into milli-amperes or thousandths of an ampere. According to ohm's law, 1 volt. through 10 ohms would give $\frac{1}{10}$ of an ampere or 100 milli-amperes, or 20 volts through 100 ohms would give 20-100 or $\frac{1}{5}$ ampere or 200 milli-amperes. The resistance of the body is sometimes as high as 200 ohms, and as each Leclanche cell has an E. M. F. of $1\frac{1}{2}$ volts, it would take a little less than 28 cells or 40 volts to give $\frac{1}{5}$ of an ampere through the body.

A coulombe is an ampere flowing during the period of one second, but it is a term which is only beginning to come into general use.

RARITY OF TAENIA IN THE COUNTRY.

Read at the July (1888) meeting of the District of Bedford Medical Association

By A.D. STEVENS, M.D.,
Dunham, Que.

MR. PRESIDENT AND GENTLEMEN:—I was yesterday reminded by a confrère that my name was mentioned, among others, by the Chairman at the last meeting, to read a paper on this occasion. We now and again see it stated by Journalists, when soliciting contributions, that the daily life of almost every active medical man furnishes material for a subject which may be made interesting to readers or listeners. Whatever truths you may have found in this statement I cannot say; but, with ample notice and a more or less active practice, I confess I am quite at a loss to decide upon a subject worthy of your attention. Nothing has occurred in my field of observation, for some time past, that possesses sufficient novelty or significance to relate within your hearing, unless it be, perhaps, a case of tape-worm or taenia.

I do not pretend to know the range of experience of the gentlemen who are with us to-day, but I may say that so far as my own work is concerned, tape-worm has been found exceedingly rare,—so rare, in fact, that the one I am about to refer