have to pay a small amount for treatment, for unfortunately there are, as yet, only three entirely free beds.

THE CORRECT PRONUNCIATION OF MEDICAL TERMS.*

By WM. DULANEY THOMAS, M.D., and EUGENE L. CRUTCHFIELD, M.D., F.S.Sc. Lond.

THE amount of false pronunciation noticeable in the speech of medical men is a matter of which very few are aware until their attention is called to it. We refer here not to errors made in the use of their mother tongue, though the number of these is also truly appalling, for it is a well-known fact that physicians as a class are more deficient in general education than the members of any other profession. We desire, however, to call attention to some of the mistakes so common in the use of technical terms. This is a subject little dwelt upon. In fact, we do not remember having ever heard it alluded to from the lecturer's desk, nor have we ever seen an article in any medical journal in which this topic was discussed.

Of the importance of the question there can be no doubt. It is as necessary for a professional man to pronounce correctly the technical terms incident to his calling as it is for an educated person to observe the rules of orthoepy when speaking his native language.

We propose to mention, first, a group of words having a common ending generally mispronounced, and then to give a number of terms not admitting of classification, the pronunciation of which is also frequently at fault.

Groups.—Words ending in *alis*, as digitalis, frontalis, pyramidalis, etc. In these the sound of *a* is long, as in the word day; not short, as in alley.

Words ending in *ata* and *atus*, as oblongata, innominata, meatus, hiatus, seratus, etc. Here also the sound of *a* is long (as *a* in gay).

Words ending in *cele* (Greek *ke-le*, a tumor), as hy-

us, de-tri-tus, duo-de-num, ec-zema (not ec-ze-ma), empye-ma, en-ema (plural en-em-ata), ep-u-lis, epizo-ot-ic (not epi-zoot-ic), eu-sta-chian (pronounced yu-sta-kean), ex-crement, ex-cretory or ex-cre-tory (not ex-cre-tory), fa-ri-na, feb-rifuge (feb as in February), febrile (pronounced either fee-bril or feb-ril), fo-ra-men (plural fo-ra-mina); *ra* like *ray*; gal-banum, gle-noid, glo-noin, glu-tae-us (not glu-teus), gly-coch-olic, gra-phi-tes, guaiacum (pronounced gwa-ya-cum), hel-leb-orus, hy-dran-ge-a or hy-dran-gea, hy-per-trophy, hyper-plasia, hyo-scy-amus and hyo-scy-amine, il-i-acus and il-i-aca (*i* long), i-o-didum (not io-di-dum), i-od-o-form (Webster) or i-odo-form (Dunglison), ja-la-pa, jug-ular (Webster, ignoring its derivation from Latin *jugulum*, says *ju-gular*), kre-atinine (Dunglison) or kre-at-inine (Webster), le-va-tor, lichen pronounced li-ken or litch-en (as a medical word Smart gives li-ken, as a botanical term litch-en; Dunglison pronounces it li-ken); liquor (pronounced lik-ur), mas-seter (Webster) or mas-se-ter (Dunglison), mal-le-olus, matico (pronounced ma-tee-co), media-sti-num, mem-bra-na, met-as-tasis and meta-stat-ic, mol-ecule, na-res (genitive, na-rium), na-sus, neu-rog-lia, o-rig-anum, os (bone), short o, as in os innomi-na-tum, os (mouth), long o, as in os u-teri, par-esis, pharmaco-poe-ia (pro-

THE MANUFACTURE OF LIQUORS AND PRESERVES.*

By J. DE BREVANS, Chief Chemist of the Municipal Laboratory of Paris.

AT the same time the temperature of the liquid is determined by means of a thermometer, so that the correction for temperature may be made, the alcoholometers being graduated at a temperature of 15° C., and a correction must be made for all other temperatures. To facilitate or rather eliminate this correction Gay-Lussac's tables are used. The tables are constructed as follows: On the first horizontal line is given the apparent strength, that is to say, the degree marked by the alcoholometer when it is plunged in the liquid at the temperature of the surroundings. In the first vertical column are inscribed all temperatures between 0° and 30° (Centigrade). The real strength of the liquid will be found at the point of intersection of the vertical column, which is commenced by the apparent strength, and the horizontal line, which corresponds to the actual temperature. The volume, which at 15° (C.) would occupy 1,000 liters measured at the temperature at which the apparent strength has been taken, is

TABLE I.

Temperatures.	INDICATIONS OF THE ALCOHOLOMETER.																			
	APPARENT STRENGTH.																			
	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°
0°	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
1	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
2	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
3	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
4	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
5	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
6	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
7	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
8	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
9	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
10	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
11	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
12	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
13	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
14	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
15	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
16	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
17	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
18	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
19	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2
20	1.3	2.4	3.4	4.4	5.4	6.5	7.5	8.6	9.7	10.9	12.2	13.4	14.7	16.1	17.5	18.9	20.3	21.6	22.9	24.2

CURED AND GOING AWAY.

drocele, bronchocele, mucocoele. In these the termination should be divided into two syllables, so that the pronunciation of these words is, hy-dro-ce-le, broncho-ce-le, mu-co-ce-le. We are aware of the fact that Webster does not give this pronunciation, but it is that advocated by Dunglison, and it is certainly borne out by the etymology of these terms.

Words ending in *ery*, as dysentery, mesentery, psor-entery. In these only the pre-antepenultimate syllable should be accented. Therefore the pronunciation of these words is dys-ent-ery, mes-ent-ery, psor-ent-ery (not dysen-ter-y, mesen-ter-y, psoren-ter-y, as we so often hear).

Words ending in *itis*. In these the sound of the first *i* of the termination is long (like *i* in kite). Consequently we should say bron-chi-tis, i-ri-tis, gingi-vi-tis; and not bron-chee-tis, i-ree-tis and gingi-vee-tis.

Words not admitting of classification (the accented syllable is in italics): ab-do-men (not ab-domen), o is long as in note; accele-ra-tor u-ri-næ, ac-u-punct-ure (Dunglison erroneously says "ay-cu-punct-ure"), ad-ju-vant (Webster) or ad-ju-vant (Dunglison), al-bi-no, albu-gin-æ, al-lop-athy, an-em-ic (although Webster, ignoring the derivation of the word, makes it an-em-ic), an-ti-cus, a-nus (not an-us), a-pis mel-lif-ica, a ppa-ra-tus, as-arum, asthe-ni-a (not as-thee-nia), bro-mide (pronounced bro-mid, o is long); bro-midum (pronounced bro-mid-um), ca-da-ver (da as in day), can-tharis, car-bo-nas, ca-se-ine or ca-se-in (not case-ine nor cas-e-in), cer-vi-cis (not cer-vicis), cer-eb-um and cer-e-bral (not ce-re-brum and ce-re-bral), cer-ebro spi-nal, ci-ca-trix (plural cic-a-tri-ces), cemi-cif-uga, cat-echu (pronounced kat-eshoo), ci-tras or cit-ras; ci-trate or cit-rate, ci-tric or cit-ric, ci-trus or cit-rus, chim-aph-ila (pronounced kim-aph-ila), co-ro-na, chol-ic (not cholic), chin-inum (pronounced kin-inum), col-chieum (pronounced kol-ki-kum), conjunc-ti-va, co-ni-um, cru-re-

nounced pharmaco-pee-ya), phthisis (pronounced thigh-sis), phthisical (pronounced tiz-ical), phar-yn-geal or pharyn-ge-al, plat-ina or plat-ti(tee)na, so pla-ti-num or pla-ti-num, pleth-ora (Webster) Dunglison gives ple-tho-ra, in accordance with Walker's rule that words imported whole from Greek or Latin should keep their original accents; ple-tho-ric or pleth-oric, pre-puce, pos-ti-cus, pru-ri-tus, qui-nia (Dunglison), quin-i-a (quin-ia), quin-ina (quin-ina) qui-nine or quin-nine (Webster); ranula (pronounced ray-nula), re-si-na, ro-se-ola, ru-be-ola, sacral and sacrum (pronounced say-eral, and say-erum), sa-git-tal (Dunglison) or sag-ittal (Webster) *g* is like *j*; sa-ti-va, schindylesis (Greek word pronounced skin-dye-les-sis), se-ro-tina (o long), squa-mous (pronounced squay-mus), syr-inge, syr-up (*y* pronounced like *i* in sit), sy-ru-pus, tabes (pronounced tay-beez), ta-ran-tula or ta-ren-tula, tau-roch-olic, tin-ni-tus (*i* of ni long), trachea (preferable pronunciation tray-chee-a; allowable, tray-che-a; common but wrong, trak-ee-a), troche (pronounced tro-kee, o long), tym-panum, umbi-li-cus (*i* in li long), vaginal (pronounced vaj-in-al or va-jy-nal), va-ri-ola (*i* long), wormi-a-na, xiph-oid, yeast (yeest), yolk (yolk, o long, or yoke), zin-giber (genitive, zin-gib-eris), *g* like *j*; zy-go-ma (*y* and o long, Dunglison and Webster; according to Walker's rule, it should be zyg-oma, *y* being short and accented, as in the original Greek).

It is not to be supposed that the above list embraces all the terms that could be cited in this connection. It is, however, sufficiently exhaustive to direct the attention of the reader to the subject, to show him its vastness, and to give him an insight into the amount of incorrect pronunciation common among medical men.

THE water pump of to-day is but an improvement on a Grecian invention which first came into use during the reign of Ptolemies Philadelphos and Energetes, 283 to 221 B.C.

given by the number inscribed under the figures representing the actual strength, or, if there is none, by the first number encountered at the left on the same line.

(To be continued.)

COCKLE SEED.

A COMMON impurity in many seeds which are used as food for live stock is the seed of corn cockle (*Agrostemma githago*). Notably is this the case on the Continent, and especially in Hungary, where the refuse from the machines used in cleaning grain consists chiefly of cockle seed, and is largely used in feeding swine. It appears, as a rule, to have no ill effect upon these animals. Upon other animals, however, it sometimes has serious and even fatal effects, especially upon calves and dogs. According to Kobert (*Landw. Centralbl. Provinz Posen*, 19) it would appear that the seeds contain a glucoside—saponin $C_{27}H_{48}O_{18}$ —which acts as a poison either when eaten in the form of cockle seed or when introduced into the blood. Various animals are affected in different degrees, but dogs, cats and birds soon die when fed upon the seed. The poison decomposes the blood, dissolving the red corpuscles, and also destroys the sensitive albuminoid portion of the nerve elements. Heating to 50° C. decomposes the saponin and renders the seed harmless. Since this glucoside is found to lie only just below the surface of the seed, Kobert suggests that the seed should be coarsely ground and the outer husk separated; to cook the meal would be a still safer precaution. A good deal of cockle seed comes into the port of Hull, chiefly, it is presumed, among grain which has not been screened. From such seeds as linseed it is removed by screening before pressing, but it is too often found in the cake which results after the oil is expressed from the linseed. A considerable quantity

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* Continued from page 14332, SUPPLEMENT, No. 897.