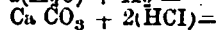
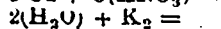
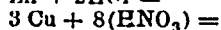
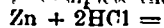


7. Complete the following equations.



8. (i) Compare the properties of Oxygen with those of Nitrogen Monoxide.

(ii) What test may be employed to distinguish between these two Gases.

Values:—1, 20; 2, 10; 3, 8; 4, 10; 5, 12; 6, 10; 7, 12; 8, 10+8,

## Practical Department.

### THE PROBLEM OF TEACHING TO READ.

BY J. M. D. MEIKLEJOHN, M.A.

(Continued from last month.)

It will be seen that this irregularity and want of keeping faith fall chiefly upon the vowels. We have in our language 104 different ways of representing to the eye 13 vowel-sounds. Let us take a few of the most striking cases. Short *i* is represented in our English notation by 13 symbols: short *i* by 12; long *i* by 11; long *ī* by 13; short *ū* by 11; long *ū* by 13; short *ū* by 13, and long *ū* by 12. We, who are grown up, have been so long accustomed to these things, that we do not notice them; but the child has to notice them, and he suffers from them more or less—and generally more.

The digraphs, too, perplex and confuse the child. The oddest of them all is *gh*, which we use in the writing of seventy-five words. But in sixty-three of these we ignore the *gh* entirely—and in nine of them we make an *f* of it. The story of the *gh* is comical enough. As nearly as I can make it out, it is this: The Normans, who had been learning French for several generations, had as a consequence been throwing aside and leaving unuttered their native guttural sounds. Perhaps, in some cases, the muscles of the throat, which are employed to utter guttural sounds, became atrophied; but in any case it had grown to be the 'fashion' not to pronounce throat-sounds; and the English or Saxon scribes wrote them down faithfully, but quite simply. They wrote *light*, *might*, and *night*—as *liht*, *milt*, *niht*; and the *h* had a more or less guttural sound. But the Normans declined to pronounce this *h*; they either could not or would not. Then said the Saxon scribes: 'Oh! you fine Norman gentlemen will not sound our language as it is; you ignore our gutturals; we will make you sound them.' So they strengthened the *h* by putting a *g* in front of it; just as a farmer might strengthen a hedge by putting a strong wooden fence in front of it. But the Normans respected the one no more than the other; *gh* is in fact far more difficult to sound than simple *h*; and accordingly they now ignored both. But the *gh* remains—a moss-grown boulder from an ancient glacial period, when gutturals were precious, and men still believed in the truthfulness of letters.

The work done by the letter *e* is perhaps the most remarkable instance in our language of a union in one letter of real work with superfluous busybodiness. Like the learned counsel in Chaucer's *Prologue*:

And yit he seemēd busier than he was.

There is—

- (1) Its usual work before consonants, as in *wet* and *went*.
- (2) Its use to lengthen the preceding vowel, as in *mate*.
- (3) The doubling of itself to make its own long sound as in *feed*.
- (4) Its combination with *a* for the same purpose, as in *meat*.
- (5) Its combination with *a* for the opposite purpose, as in *bread*.
- (6) Its coming after *i* to make a long sound, as in *pie*.
- (7) Its coming before *i* for the same purpose, as in *eider*.

- (8) Its combination with *i* for a quite different purpose, as in *piece*.
- (9) Its combination with *i* to make its own long sound as in *receive*.
- (10) Its going before *w* to make a long *u* sound, as in *few*.
- (11) Its going after *u* for the same purpose, as in *due*.
- (12) Its going after *u* to make a quite different sound, as in *true*.
- (13) Its following *o* to make a long *o*, as in *foe*.
- (14) Its preceding *o* for the very same purpose, as in *yeoman*.
- (15) Its combination with *y* to make a long *a* sound, as in *they*.
- (16) Its combination with *y* for no purpose at all, as in *money*.
- (17) Its combination with *i* to make a long *a* sound, as in *vell*.
- (18) Its combination with *i* to make its own short sound, as in *heifer*.
- (19) Its appearance at the end of a word with no purpose at all, as in *couple*.

- (20) Its combination with *d* with no purpose, as in *walked*.

By this time, the child can hardly be expected to know what an *e* is and what it is not.

The following are a few more of the

#### CONTRADICTIONS OF E.

1. { Dream } Here it is *long* and also *short*.
2. { Pie } Here it *lengthens* and also *shortens*.
3. { Pie } Here it comes *after* and also *before* for the same purpose.
4. { Due } Here it has an effect on the *u*, and also no effect.

Nothing can be more confusing and distressing to the young learner, unless the fairy *Good Order*, summoned by the Teacher, comes in to assort these tangled threads and intertwined distractions.

It may be useful to sum up all the above statements in the form of a concise

#### BILL OF INDICTMENT AGAINST OUR ENGLISH NOTATION.

1. An Alphabet of 26 letters is set to do the work of 45 sounds.
2. In this Alphabet of 26 letters, there are now only 8 true and fixed quantities.
3. The remaining 18 have different values at different times and in different positions; and sometimes they have no value at all. In other words, they have a topographical value.
4. Some of these 18 letters do—in addition to their own ordinary work—the work of three or four others.
5. A Vowel may have from 20 to 80 functions in our English Notation; a Consonant may have two or three.
6. There are 104 ways of representing to the eye 18 vowel-sounds.
7. Six of these vowel-sounds appropriate to themselves 75 ways of getting printed.
8. In the most purely English part of the language, the letters are more often misleading than not. In the word *cow* or *they*, for example, there is no single letter that gives any true knowledge or guidance to the child. That is, the letters in the purely English part of our composite speech have a historical, but no present value.
9. The monosyllables of the language contain all its different notations, and these with the maximum of inconsistency. In reading the monosyllables, the child can trust neither his eyes nor his ears.

If this notation—which is the dress of the language—could be exhibited to the eye by the help of colours, it would be seen to be of the most piebald characters. It would be not inaptly described by a sentence in one of Dickon's novels: 'As for the little fellow, his mother had him attired in a costume partly Scotch, partly Hungarian; mostly buttons,\* and with a Louis Quatorze hat and scarlet feather.

\* The buttons would represent the *cs*.