longest line that can be found, that will measure each of the former, will be 1 inch long. Hence we say 1 is the G. C. M. of 12 and 13. Had the lines been 20 inches and 24 inches, respectively, the G. C. M. or greatest unit line would have been 4 inches long. Again, had the lines been 17½ inches and 21¼ inches in length, respectively, the longest line that would have measured them would have been 1¼ inches long, giving 14 and 17 lengths respectively. Nos. and magnitudes that have no C. M., are called *incommensurable*, which should be, but it appears has not always been, distinguished from the term *prime*. The side and diagonal of a square are incommensurable.

"All primes together have no common measure
    Exceeding an ace which is all their treasure."
The Arte of Vulgar Arithmeticke, Thos. Hylles,
    London, 1600.

"Two whole expressions are said to be prime to one another which have no common measure but unity." *Sandeman's Pelicotetics, Cambridge* 1868.

The difficulty arose from defining a *measure* of a No. to be itself a No. and then denying that unity is a No. The same principle would deny that 6 is a multiple of 6, and therefore that 6 is the L. C. M. of 3 and 6, for it would thus not be a multiple of the latter. (See Ans. to No. 3, Curiosities.)

<center>PROBLEMS, &c.</center>

42. By discounting a note at 20 *per cent.*, I get interest at the rate of 22½ *per cent.* per annum; how long does the note run? LEVI PALMER, Sutherland's Corners.

43. Analyze "But with the breath . . . . ears;" parse *fill* and *mountaineers*. Fifth Reader, p. 277. J. TAIT, Georgetown.

44. Is the corrected (! !) answer to prob. 41, page 117 of Smith and McMurchy's Elementary Arithmetic, correct? S. C. SMOKE, Paris.

45. A, who is 24 of his own steps ahead of B, makes 2 and 1-5th steps while B makes 3¼, and 3 and 1-8th of B's steps equal 5 of A's; required, the number of steps B must make to overtake A. A. G. CAMPBELL, Durham.

56. Required solution of Problem 7, Paper 6, p. 161, Advanced Arithmetic. EFFENDI, Invermay.

<center>EDITOR'S DRAWER.</center>

DEFERRED.—Some reviews of works received are deferred till the November No.

TO CONTRIBUTORS.—We have on hand a number of contributions awaiting insertion. They will receive attention as soon as we can find space for them.

GOING ASTRAY.—Notwithstanding we take great care to mail the TEACHER correctly and promptly, we occasionally hear of numbers going astray. In every case, when a subscriber fails to get it, on being duly notified, we cheerfully re-mail it.

TO TEACHERS.—We respectfully ini te teachers to send us any *practical* hints, suggestions, or queries, which may occur to them in the every-day work of the school room. We want to make our journal a medium through which they can make known to each other the results of their experience and observation.

CAMPAIGN OF 1874.—We would direct special attention to the announcement of our Fall Campaign for 1874, in this issue. We make very liberal offers, and are determined to spare no exertion to at once secure a wide circulation, and make the TEACHER one of the indispensable aids to Education in this Province. We ought to have every Teacher in Ontario on our Subscription List. Now is the time to subscribe!

THE TEACHER FOR NOTHING.—As an inducement to teachers to subscribe for the ONTARIO TEACHER we promise, during 1874, to publish in full the questions at the County Board Examinations. We have already published nearly all the questions at the last July Examinations. Teachers will thus see that, as the Examination questions for one year cost $1.20, by subscribing for the TEACHER they will get all the other valuable matter in the TEACHER, during 1874, FOR NOTHING.

PRIZE ESSAY—We are now making arrangements for the appointment of a competent Committee to examine and give their award on the Essays sent in, in response to our offer in the September No. We trust there may be a large number of competitors. Let no one give up despairingly under the impression that he, or she, has no chance of winning the prize. Go on and do the very best you can, and who knows but the prize may be yours! Even if you fail, the very effort you make in writing it will be beneficial, and all essays that merit it, even if they fail to win the prize, will be suitably acknowledged.