the four kingdoms on May 8, 1660, and did not enter London till May 29,—thus he was in all respects king of Scotland at least three weeks before he was crowned king of England. And Edward I was acknowledged king on the day of his father's funeral (Nov. 1272,) the prelates and nobles swore allegiance to him, and his reign was dated from that day. He was crowned August 19, 1274. (He was the earliest king whose reign was dated from a time earlier than his coronation. Freeman's *Growth of the English Constitution.*) Since the *Act of Succession*, all *monarchs* of England are *kings* from their succession. Finally, where was Richard King of the Romans crowned ? (1256.)

16 A goes 16 ½ rods and B goes 17 rods, each in 3 minutes; therefore A will go 16 ½ rounds while B goes 17 rounds, thus bringing B up to A. See No. 3 of Curiosities.

17. If Imperial gallon 138.637 inches ; if wine gallon of U. S., 115.5 inches.

18. On the Longwoods Road and north bank of the River Thames, just opposite the present village and Moravian Church (on south bank.) (We hope to obtain permission to publish a letter received from H. T. Scudamore, defining and describing the location of the village and containing much other valuable information collected from actors in the war of 1812, and from some who were actually In the battle.)

19. No solution was sent with this problem, but it was stated that it had been published for some time in an English periodical without a solution being received. No wonder. It requires the resolution of an equation of the degree 150, reducible to a 3-term equation of the degree 151. The solution would involve an immense labor, but present no mathematical difficulty. The Editor has no leisure at present to examine for a solution by repeated substitution.

"When your correspondent asks 'what is the rate per cent. on the balance left unpaid at the end of each year?' he seems to imply that the rate per cent. varies from time to time. Such cannot be the case, because the rate is determined by a definite equation." H. T. SCUDAMORE.

20. The weights are 1, 3, 9, 27, 81, 243 lbs. respectively. Reason—Any No. not greater than 364 can be expressed by not more than six digits in the scale of three, using as digits positive 1, zero, and negative 1. In the common method of reducing to the scale of 3, whenever there is a remainder 2, add 1 to the dividend and write i, meaning negative 1, for the remainder. Thus 22 (scale X) is 101ii, (scale III) and hence to weigh 221 lbs. put the 243 lbs. and the 9 lbs. weights in one

scale and the 27 lbs., 3 lbs., and 1 lb. weights in the other.

21. "This of yours" is now, as in E. E. generally applied to one out of a class whether the class exist or be imaginary. We could say "this coat of yours," but not (except colloquially) "this head of yours." It is however commonly used by Shakespeare, where even the conception of a class is impossible. "This of hers, there" &c., seem used as an adjective like the Latin "iste." "This mouth of you" was felt to be harsh, the "you" being too weak to stand in such a position. "This your mouth" requiring a forced and unnatural pause after "this" was somewhat more objectionable to Shakespeare than to the Latin style of Milton and Addison. Hence "this of you" was used but modified. ABBOTT'S SHAKESPEARIAN GRAMMAR.

PROBLEMS AND QUERIES.

32. What will be my gain per cent. by purchasing goods on 6 months' credit, and selling them immediately for cash at cost, money being worth 8 per cent? A. D. CAMPBELL, GEORGETOWN ACADEMY.

33. J. Jones accepted an agency from D. McInnes to buy and sell grain for him. J. Jones received from D. McInnes grain in store, valued at $135.60, and cash $222.10. He bought grain to the value of $1346.40 and sold to the amount of $1171.97. At the end of four months McInnes wished to close the agency, and Jones returned him grain unsold, valued at $437.95. Jones was to receive for services $48.12. Did Jones owe McInnes, or McInnes owe Jones, and how much ? WM. COUTTS, HAMILTON.

34. Parse *namely* and *plants*, Fifth Reader, p. 118, line 3. COMUS READ.

35 Give the relation and parsing of *who*, p. 63, line 6, and *decline* p. 204, stanza 5, v. 1, both of Fifth Reader. Explain the meaning of the couplet in which the latter example occurs. AQUILA LANE, ARKONA.

36. How many yards of carpet 2 ft. 3 ins. wide, with a 15 inch pattern, will be needed to carpet a room 15 ft. 6 ins. by 13 ft., (i) if the pattern be the same running both ways, (ii) if the pattern only run one way? EDITOR

ERRATUM.

In line 12 of The Scuffle, No. 22, read *recovered* ⅚ *of it* instead of *recovered* ⅜ *of it.* We published the problem as given in GOUGH, without noticing that as proposed it will not give the answers usually accepted. We shall publish the answers both to ⅜ and ⅚, as by changing the meaning of *it*, both forms of the question are possible. We hope some