from 5 to 20 per cent. The academic department has 732 students as compared with 636 a year ago. The medical school, which for the first time required more than a high-school training for admission, has practically the same number of students as it had a year ago, 316 men fulfilling the requirement of two years' college work having entered the school. The number of officers and instructors is the largest in the history of the university, numbering 761, including the emeritus professors, of whom there are 16. The newly-appointed professors include: William B. Fite and Herbert E. Hawks, in the department of mathematics; Walter Irvine Slichter, electrical engineering; George V. Wendell, physics, and Milton C. Whitaker, industrial chemistry.

DR. EDGAR F. SMITH, professor of chemistry in the University of Pennsylvania, became provost on New Year's Day, succeeding Dr. Charles C. Harrison, who had held this office for seventeen years. Dr. Smith will continue to lecture on chemistry.

PROFESSOR G. R. THOMPSON, professor of mining, University of Leeds, has been appointed professor of mining at the South African School of Mines and Technology, Johannesburg, and principal of the college.

PROFESSOR GUIGNARD, who has served for fifteen years as director of the Paris School of Pharmacy, has resigned his appointment and is succeeded by Mr. Henry Gautier, professor of mineral chemistry at the school.

THE professors of the Paris medical college have nominated Dr. Dejerine, professor of medical pathology, to the clinical chair of diseases of the nervous system at the Salpêtrière. This position, once held by Charcot, was recently occupied by Professor Raymond, who died last September.

DISCUSSION AND CORRESPONDENCE

INORGANIC NOMENCLATURE

IN the issue of SCIENCE for December 9 appeared an article on the nomenclature of the acid phosphates. The author, R. E. B. McKenney, pointed out the difficulty of identifying these from the trade names, and suggested more exact names as primary, secondary and tertiary or, better, mono-, di- and tri-potassium phosphates. While the change would be a step in the right direction it fails with salts of the polyvalent metals; for the mono-calcium salt would correspond to the di-potassium and thus the confusion would be perpetuated. It appears to the writer that a more scientific method would be to indicate the number of replaceable hydrogen atoms (per molecule of acid) present in the salt. Thus K_2HPO_4 and $CaHPO_4$ would be named monohydrogen phosphates while KH_2PO_4 and $CaH_4(PO_4)_2$ would be the di-hydrogen phosphates. The normal phosphates could then be designated as such or simply as phosphates.

In this connection I would call the attention of chemists, manufacturers and printers of chemical names to the need of a thorough revision of inorganic nomenclature. It is still common to hear and read the names potassic hydrate for potassium hydroxide and sodic carbon for sodium carbonate; the hydrogen (acid) carbonates are called bicarbonates because in making them two equivalents of the acid are required for each equivalent of the base. But modern chemistry is founded on molecular rather than equivalent quantities and a bicarbonate should mean, therefore, two carbonate (CO_3) radicals in the molecule of the salt. Besides, the bichromates are not acid salts at all in the sense of containing replaceable hydrogen atoms. Likewise the percarbonates, persulphates and permanganates do not follow the nomenclature of the perchlorates, perbromates and periodates. Also the dioxides and peroxides are named with no discrimination as to differences in constitution.

Has not the time come for scientific men to be exact and scientific in the matter of chemical nomenclature, and to demand of manufacturers the use of names which shall indicate the composition of the material designated? And would it not be well for section C of the American Association, or the American Chemical Society, to appoint a permanent committee on inorganic nomenclature to

the end that all chemical names shall be understood, because they indicate exact composition?

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COASTAL SUBSIDENCE IN MASSACHUSETTS

To the Editor of Science: While Professor D. W. Johnson has clearly shown in the November 18 issue of Science that there are certain factors which produce fictitious appearances of coastal subsidence, chief of which is the irregular height of the tidal wave due to the varying character of the shore, there are a number of marks of subsidence on the Massachusetts coast which it is not probable can be so explained. For example, near Misery Island, Beverly, stumps of forest trees appear in place at a depth of twelve to fourteen feet below low tide.

The striking example given by Professor Johnson of the fictitious appearance of coastal subsidence at Scituate proves also, it seems to me, that subsidence has really been going on. The very fact that the level of the inside marsh was several feet below the outside level of high tide showed how much the land had sunk since the mouth of the North River had been nearly closed. A very similar state of affairs exists in the region of the Norfolk Broads in the eastern part of England. Here, in the same way, the land is slowly sinking, but, owing to the silting up of the mouths of the Yare and the Bure rivers, aided by dyking, the tides have been largely excluded, the marsh has become fresh and has so long ceased to build up that it is below the level of high water outside, and there is danger of the sea breaking through the sand dunes and, as at Scituate, drowning out the region.

Charles W. Townsend
Boston,
December 2, 1910

CALENDAR REFORM

To the Editor of Science: I read with interest Professor Chamberlin's suggestions for the reform of the calendar, in the current number of Science, November 25. It happens that I had thought of a scheme the same as that of Professor Chamberlin in all essential features, but was led to abandon it before publication because I considered that its disadvantages outweighed the advantages.

The advantages of the seasonal division are very slight. The scheme would suit conditions here as well as the present arrangement. In Great Britain, however, the winter begins in November, spring in February, etc. Hence Professor Chamberlin's arrangement with winter beginning in January would not suit conditions and would not be accepted. The earth receives the smallest amount of heat and light at the winter solstice, and neglecting lag this should be midwinter. To call it the beginning of winter as astronomers do, is to allow 45 days lag. To call January 1 the beginning seems to be allowing 55 days lag, not 10 as stated by Professor Chamberlin. This lag varies so much in length with latitude and local conditions that it does not appear that any division of the months into seasons will be universally satisfactory.

The desirability of a year divisible into quarters is unquestioned. But let us see the disadvantages of the scheme. A man who pays rent, for instance, would find his rent due in the first quarter on the first of the month, say. It would be due the Monday of Easter week, on the twenty-second of the month in the second quarter, fifteenth in the third and the eighth in the fourth. Likewise with monthly salaries and, in fact, all business done by the month. A promissory note dated February 15 due in two months would be due April 8, but if due in one month, March 15, or if due in nine months it would be due October 22. If due in eight months, on the first day of Gregorian week. Likewise, in finding the interval in days between two days we should always need to be on guard against omitting or including wrongly one of these weeks. This problem is a very common one in business. Since the suggestion has been made, there will be no difficulty in multiplying these illustrations indefinitely. When we compare this complexity with the simplicity of the same problems in the regular 13 months of 28