

tion is due to a deficit of 5,112 births and an increase of 10,989 deaths. The departments in which the birthrate exceeds the deathrate are those of the north, Pas-de-Calais, Brittany, the frontier regions of the northeast, Limousin and Corsica. On the other hand, the valley of the Garonne, Normandy, the plateau region of Langres and Dauphiny continue to lose ground. The number of deaths (703,638) is greater by 11,000 than that of 1912, which was lower than any recorded number since the opening of the nineteenth century. The proportion of deaths to the population is 178:10,000, as against 172 in 1912, 196 in 1911 and 179 in 1910. The mortality has increased in 64 departments, and particularly in Bouches-du-Rhône, Dordogne, Var, Haute-Savoie, Corsica, Somme, Haute-Vienne, l'Aveyron and Tarn-et-Garonne. In 1913, 298,760 marriages were recorded, or 13,169 less than in the preceding year. The proportion of the newly married for each ten thousand has dropped from 158 in 1912 to 151 in 1913. The number of divorces has increased by about 500; 15,076 were recorded in place of 14,579 in 1912. The increase has therefore continued; in 1900 there were but 7,157 divorces; in thirteen years the number has more than doubled.

THE University of Chicago Press announces for fall publication the first two titles in the University of Chicago Science series. The size of the books will be 100 to 150 pages, duodecimo. The books that are ready for publication are: "The Origin of the Earth," by Thomas C. Chamberlin, head of the department of Geology in the University of Chicago; and "Isolation and Measurement of the Electron," by Robert A. Millikan, professor of physics in the University of Chicago.

THE Smithsonian Institution has issued a treatise on "Atmospheric Air and its Relation to Tuberculosis," by Dr. Guy Hinsdale, as one of the prize essays on that subject presented in connection with the Washington Tuberculosis Congress. The book including 136 pages of text and 93 plates of illustrations, forms publication 2,254 of the Smithsonian Miscellaneous Collections. It is not a public document and is distributed free only to libraries and specialists.

UNIVERSITY AND EDUCATIONAL NEWS.

It is proposed to establish a school of public health at the University of Minnesota, and a meeting was held to discuss plans for the school, July 13. The instruction is to be entirely by the present teaching staff, and will include the consideration of the subject from a medical as well as from a modern sanitary engineering standpoint.

SCHOLARSHIPS have been awarded by the Educational Fund Commission, of which Dr. John A. Brashear is president, to the teachers of the public schools of Pittsburgh, for the summer session of various educational institutions as follows:

Commonwealth Art Colony, Boothbay Harbor.	4
University of Michigan	2
North American Gymnastic Union, Indianapolis, Ind.	1
Chautauqua Institution, Chautauqua, N. Y....	10
University of Chicago	11
Columbia University	21
Cornell University	16
Dartmouth	4
Harvard University	14
Zanerian College of Penmanship, Columbus Ohio	3
Ocean City Summer School	3
University of Pennsylvania	4
Pennsylvania State College	7
University of Vermont	4
University of Pittsburgh	4
American Institute, Northwestern University.	1
University of Wisconsin	11
University of Berlin, Germany	1
University of New York	1
N. Y. School of Fine and Applied Arts	1
Munich Trade School, Germany	1

Total number of teachers sent in 1914... 124

REGISTRATION for the summer quarter at the University of Chicago has been announced, and an increase over the attendance of a year ago is shown. The total number of men registered on July 3 in the graduate school of arts, literature and science was 726 and of women 421, a total of 1,147; in the senior and junior colleges 1,249 men and 942 women, a total of 2,191; in the professional schools (divin-

ity, law, medicine and education) 577 men and 669 women, a total of 1,246; and excluding duplications, the registration for the entire university amounts to 1,696 men and 1,598 women—a grand total of 3,294.

DR. A. I. RINGER, instructor in physiological chemistry at the University of Pennsylvania, has been elected assistant professor in physiological chemistry in the University of Pennsylvania School of Medicine.

DR. EUGEN VON HIPPEL, of Halle, has been called to the chair of ophthalmology at Göttingen, in succession to his father, Dr. Arthur von Hippel, who retires at the close of the present semester.

DR. FRANZ KEIBEL, of Freiburg, has been called to the chair of anatomy at Strassburg, as the successor of Professor G. A. Schwalbe.

DISCUSSION AND CORRESPONDENCE

TIN DISEASE AND POLAR EXPLORATION

It will be recalled that the Scott and Amundsen Antarctic expeditions were greatly handicapped by losing their petrol. Amundsen stated in one of his lectures in America that their petrol tins required frequent resoldering. According to the diary left by Captain Scott this "mysterious loss of petrol" was one of the chief contributory factors in their failure to return to safety.

In Scott's diary¹ of the return journey under date of February 24, 1912, he states:

Found store in order except shortage oil—shall have to be *very* saving with fuel—. . . Wish we had more fuel.

Again on February 26 he states:

The fuel shortage still an anxiety. . . Fuel is woefully short.

On March 2:

We marched to the (Middle Barrier) depot fairly easily yesterday afternoon, and since that have suffered three distinct blows which have placed us in a bad position. First, we found a shortage of oil; with most rigid economy it can scarce carry us to the next depot on this surface (71 miles away).

¹ "Scott's Last Expedition," Scott, Huxley and Markham, p. 398.

March 4:

We can expect little from man now except the possibility of extra food at the next depot. It will be real bad if we get there and find the same shortage of oil.

On March 7:

If there is a shortage of oil again we can have little hope.

In his message to the public Scott says:

We should have got through in spite of the weather but for the sickening of a second companion, Captain Oates, and a shortage of fuel in our depots for which I can not account. . . .

In Note 26 of the Appendix, the authors, Huxley and Markham, state:

At this, the barrier stage of the return journey, the southern party were in want of more oil than they found at the depots. Owing partly to the severe conditions, but still more to the delays imposed by their sick comrades, they reached the full limit of time allowed for between depots. The cold was unexpected, and at the same time the actual amount of oil found at the depots was less than they had counted on. . . .

As to the cause of the shortage, the tins of oil at the depot had been exposed to extreme conditions of heat and cold. The oil was specially volatile, and in the warmth of the sun (for the tins were regularly set in an accessible place on the top of the cairns) tended to become vapor and escape through the stoppers even without damage to the tins. This process was much accelerated by the reason that the leather washers about the stoppers had perished in the great cold. Dr. Atkinson gives two striking examples of this.

1. Eight one-gallon tins in a wooden case, intended for a depot at Cape Crozier, had been put out in September, 1911. They were snowed up; and when examined in December, 1912, showed three tins full, three empty, one a third full, and one two thirds full.

2. When the search party reached One Ton Camp in November, 1912, they found that some of the food, stacked in a canvas "tank" at the foot of the cairn, was quite oily from the spontaneous leakage of the tins seven feet above it on the top of the cairn.

The tins at the depots awaiting the southern party had of course been opened and the due amount to be taken measured out by the supporting parties on their way back. However carefully