known as a writer on folk-lore, and to this branch he devotes considerable attention in his essay. He does not concede much space to American writers or subjects, but for this omission the explanation in the preface relating to the difficulties of exhausting so wide a field is sufficient.

His paper, entitled 'Ueber den gegenwärtigen Stand der Volkskunde,' is published by the *Verein für Erdkunde*, in Dresden, and presumably may be obtained from it.

THE END OF THE HUMAN RACE.

One of his learned and thoughtful articles is contributed on this subject by the Marquis de Nadaillac in a recent number of the *Correspondant*. Making anew the calculation of the increase of population as compared with the increase of the food supply, he reaches the gloomy conclusion that in a few centuries there will inevitably be too little food to supply all the mouths. He compares the statistics of most civilized nations, and they appear to confirm his apprehensions. For instance, Russia alone, at its present rate of births, will in one hundred years be obliged to feed eight hundred million persons! What, he asks, can stem this overwhelming tide of population? He gives up the problem, and says that we must leave it to God, a solution which is more creditable to his piety than to his position as a scientist. The real solution is to educate men and women to the point where they will not recklessly produce offspring; nor yet ruthlessly prevent them, as is the case now in some departments of France, where the population is actually diminishing, although the wealth is above the average.

Unfortunately, modern prejudice stands in the way of a fair and full discussion of this solution.

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NOTES ON INORGANIC CHEMISTRY.

The *Berichte* for September 27th contains a description by Emerich Szarvasy, of Budapest, of two new salts formed by the action of carbon dioxide and of sulfur dioxide on a solution of magnesium methylate. The first compound is a methyl-magnesium carbonate $(CH_3)_2Mg(CO_3)_2$ and may be looked upon as a methyl salt of magnesium bicarbonate, but unlike the latter, which decomposes on evaporating its solution, the methyl salt is comparatively stable, and its solution in methyl alcohol can be boiled without decomposition. If sulfur dioxid is used in the place of carbon dioxid the methyl magnesium sulfite is formed, which is also stable. The compounds may also be looked upon as magnesium salts of methyl-carbonic acid and methyl-sulfurous acid, and show the great resemblance in many respects existing between the carbonates and sulfites.

The chemical world has great occasion to deplore the untimely end of Victor Meyer, and many lines of investigation begun by him, but not completed at the time of his death, will doubtless be for the present abandoned, while others may be carried on by his pupils and assistants, but will suffer for the lack of his guiding hand. One of his great works was the determination of vapor density at high temperatures, and while he had worked as high as 1,500°, and, perhaps, a little higher, he had entered upon investigations which would enable him to work above 2,000°. The most difficult part of the problem is to get a vessel to contain the gas, which will stand the temperature and at the same time be gas-tight. The first steps in this work are described in the last *Berichte*. The only material found which would satisfactorily withstand the heat of the furnace used, which was fired by a graphite burning in a stream of oxygen, was magnesia. This did not fuse, but when pure was very porous. A nat-

ural magnesia from the magnesite of Veitsch containing some ten per cent. of impurity, chiefly iron with silica, was found to sinter together in the heat of the graphite furnace and form gas-tight vessels. As the hottest zone of the furnace is very restricted, it was found possible to fire successfully only very small vessels in this manner. Attempts were made to fire larger density tubes in a oxyhydrogen furnace, but at the highest heat obtained the magnesia was still porous. Efforts to glaze the tubes also all resulted in failure. Here this exceedingly difficult investigation now stands, and it is to be hoped that Professor Meyer's assistant, Dr. Bodenstein, who, with Dr. von Recklinghausen, has carried it thus far, will go on with it to success. The value of density determinations at a high temperature is of great importance to chemical theory, and Victor Meyer's work has already afforded very valuable results, but if 500° more could be gained the value would be much increased.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

THE German Society of Men of Science and Physicians will hold its meeting next year at Dusseldorf, under the presidency of Professor Waldeyer, of Berlin. The secretaries of the meeting are Professor Mooren and Dr. von Viehoff, of Dusseldorf.

PROFESSOR A. A. MICHELSON, of the University of Chicago, has been made a member of the International Committee of Weights and Measures in the room of the late Dr. B. A. Gould.

WE called attention last week to the fifteenth Congress of the American Ornithologists' Union. The meetings at the American Museum of Natural History, for the presentation of scientific papers, beginning at 11 a. m. on Tuesday, November 9th, are open to the public and should prove of interest to many residents of New York. Information regarding the Congress can be had by addressing the Secretary, Mr. John H. Sage, Portland, Conn.

DR. FRIDJOF NANSEN arrived at New York on October 23d, and was in the evening the guest of the American Geographical Society, which conferred upon him the Cullum Geographical Medal and elected him an honorary member. Another reception was given to him on Monday night by the Swedish and Norwegian inhabitants of the city. A reception and dinner was offered him by the National Geographical Society, Washington, on October 26th. To-day the American Philosophical Society of Philadelphia will hold a special meeting, at which Dr. Nansen will present a paper on 'Some of the Scientific Results of Recent Arctic Explorations.' Dr. Nansen's first public lecture will be given at the Metropolitan Opera House, New York, on November 6th.

MR. E. E. HOWELL, of Washington, has just received from the U. S. Government Board of Control an order to construct a relief map of the Yellowstone National Park, for exhibition at the coming exposition at Omaha. This model, which will be $6 \times 6\frac{1}{2}$ feet in dimensions, will be based upon the surveys of the Park made by the U. S. Geological Survey and will represent the geology as well as the topography. The scale will be one inch to the mile, and there will be no vertical exaggeration. The map will be very accurate and complete, far surpassing the one made some years ago.

THE U. S. Geological Survey has practically completed the distribution of the Educational Series of Rocks, 175 suites of 156 specimens each having been sent out during the past summer to universities, colleges and technical institutions in the United States. There remains a small number of incomplete sets, which will be placed in such smaller colleges as will make them most useful. The Educational Series were prepared by the Survey with much care, for the purpose of aiding students in acquiring a general and special knowledge of rocks and promoting the study of geology.

THE first meeting of the new session of the Royal Geographical Society will be held on Monday, November 8th. After a short introductory address by the President, Sir Clements Markham, K. C. B., Mr. F. J. Jackson will give an account of the Jackson-Harmsworth expedi-