Calchaqui territory, which rather points to Aymara or Kechua affinities as undoubtedly to the arts of this extinct population.

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NOTES ON INORGANIC CHEMISTRY.

MODERN ALCHEMY.

Dr. H. Carrington Bolton contributes to the last *Chemical News* an article entitled 'Recent Progress of Alchemy in America.' It is largely devoted to such details as are known of the claims of Dr. Stephen H. Emmens, of New York, and of Edward C. Brice, of Chicago, together with the Mint Report on the Brice process. Dr. Emmens is the inventor of the high explosive Emmensite, and the author of the 'Argentaurum Papers.' It is perhaps worth while to give a brief abstract of his claims, taken from his own publications. He states that he was led to his present study by the investigation in 1892, at the instance of Commodore Folger, of a specimen of rustless nickel steel, which it was proposed to use for torpedo netting. He says that he found in both nickel and iron, and subsequently in cobalt, 'a certain product which seemed to differ from anything recorded in the text books.' Inferring that, if such a substance were found common to the metals of the fourth series of Mendeléeff's group eight, similar results would be found in other groups, he began the study of gold and silver. 'By certain physical methods and by the aid of certain apparatus' he claims to have succeeded in bringing about an extremely minute subdivision of silver, and was 'surprised to find that the substance obtained differed so far from ordinary silver that it could no longer be regarded as the same elementary substance.' His alleged substance, which he calls *argentaurum*, symbol *Ar*, he considers to be the missing element between silver and gold in the second subdivision of Mendéeleff's group two. "Argentaurum can be aggregated into molecules having a density considerably superior to that of silver molecules, and, we think, identical with that of ordinary gold molecules. Whether we are right as to this or not, the condensed argentaurum presents the appearance and is endowed with the properties of ordinary metallic gold." Dr. Emmens estimates that 'one ounce of silver will produce three quarters of an ounce of gold' at a profit of at least three dollars an ounce. He operates on Mexican dollars, and has sold to the U. S. assay office six ingots of an alloy of silver and gold aggregating in value $954.80. Dr. Emmens remarks: "The gold-producing work in our argentaurum laboratory is a case of sheer mammon seeking; it is not being carried on for the sake of science, or in a proselytizing spirit; no disciples are desired and no believers are asked for. I have every confidence that the production of argentaurum gold will be brought up to 50,000 ounces monthly within a year." Should this result be attained, the problem of bimetallism will be happily solved.

Regarding the Brice process, three government experts worked for three weeks under Mr. Brice's direction, and officially report: "We have seen not the slightest evidence of any 'creation' or transmutation. On the contrary, the claimant failed in every instance to recover the entire amount of silver and gold known to be present in the materials. The claimant seems to have devised a variety of irrational and wasteful methods for recovering a portion of the silver and gold known to metallurgists as being present in many commercial metals, such as antimony and lead." Mr. Brice's application for a patent has been again rejected. Incidentally, the assay office investigation revealed that commercial antimony contains a very small percentage of gold, which is recovered by the Brice process.

APROPOS of argentaurum, Dr. Emmens and Newton W. Emmens publish in the *Chemical News* a short article on 'Migrant Matter,' describing an experiment in which a disc of pure lead connected with a disc of pure silver by a copper spiral was kept in a wide-mouthed bottle for twelve weeks. At the end of this period the lead disc on cupellation is said to have given a silver bead weighing 0.00003 gram. "It would appear from this experiment that what is commonly recognized as solid silver is, in part at least, a migrant mode of matter * * *. We use the term 'migrant matter' because the traveling particles to which we refer are (in common with odors generally) much more akin to Crookes's 'fourth form' than to gases."

J. L. H.

SCIENTIFIC NOTES AND NEWS.

THE INTERNATIONAL MEDICAL CONGRESS.

THE New York *Medical Record*, with great enterprise, secured by cable a report, extending to a number of pages, of the Twelfth International Medical Congress, which opened at Moscow on August 19th. After the Congress had been opened by the Grand Duke Sergius and welcomed by the Minister of Public Instruction, Hospodin Dylianov, Professor Sklifosovsky, the President of the Committee of Organization, made an address in which he dwelt especially on the relations of Russia to the rest of Europe in regard to medical and scientific work. He said that one great obstacle to medical progress was the want of a common medium of communication between the men of science of different nationalities. Nowhere was this almost fatal lack so fully realized as in Russia. The great mass of Russian medical literature was a sealed book to Western peoples, and few outside of the country had any conception of the enormous amount of scientific work that was being done there. Russians recognized that their language was too difficult ever to become universally known, and they were therefore the more keenly alive to the necessity of the adoption of some international speech. He would suggest the appointment of a committee to draft a preliminary agreement on the subject, which should be laid before the next congress for consideration. The General Secretary, Professor Roth, reported an attendance of 7,300 members in Moscow. Of this number more than 3,500 were from Russia, 800 from Germany, as many from Austria, 400 from France, 300 from Italy, 300 from England, 120 from the United States, 30 from Mexico, 10 from Japan and 4 from China. Prince Gallitzin, the Mayor of Moscow, then greeted the members of the Congress on behalf of the municipality and announced that the city of Moscow had decided to establish a prize of 5,000 francs, to be awarded at each international congress, to the person who in the interval since the preceding congress shall have done that medical work which shall be deemed of the greatest benefit to humanity. Addresses were then made by the national delegates, and the honorary presidents were announced as follows: Germany—Virchow, Leyden, Ziemssen and Waldeyer; Austria — Gussenbauer, Hlawa and Rudiger; Great Britain—Stokes, MacCormac and Simpson; United States—Senn and Thayer (Billings, it was announced, would have been one of this number had he not been absent); Spain—Robert; France—Lannelongue, Le Dentu, Grasset and Pinard; Italy—D'Antona, Bottini and Lombroso.

General addresses were given by Professor Virchow on the continuity of life; by Professor Lannelongue on the sclerogenic treatment of surgical tuberculosis; by Dr. T. Lauder Brunton on the relationship of physiology, pharmacology, pathology and practical medicine; by Professor von Krafft-Ebing on etiology of progressive general paralysis; by Dr. Senn on classification and surgical treatment of acute peritonitis; by Dr. Metchnikoff on the plague, and by Dr. Robert on the mutual relations of pathology and therapeutics.

The next international congress will be held at Paris in the summer of 1900, with Professor Lannelongue as President of the Committee of Organization.

THE SEAL FISHERIES.

DR. DAVID STARR JORDAN, Commissioner-in-chief of the fur seal investigations for the United