good conduct. Arrangements have accordingly been made, says the *Hospital Gazette*, to facilitate these unions; but physiologists and pathologists must feel sundry qualms as to the expediency of such a course. The physical and moral degradation of many of these social waifs is distinctly hereditary; and a careful moral training (which is not provided for) would, at the most, only modify the tendencies which have brought them within the clutches of the criminal law. The son of a poet is not of necessity a poet, but the offspring of a bawd or an assassin is extremely likely to develop the same proclivities. If even one of the parties to the transaction were worthy of respect, some regeneration might be hoped for; but the association of two hopelessly abandoned bodies and souls is not calculated to improve matters in any respect whatever.

A CENTENARIAN SURGEON. — The *Patria* of Buenos Ayres affirms that there is now in Bolivia a surgeon, Luca Silva by name, whose age is not less than one hundred and twenty-nine years. He was born in Cochabamba in 1760, and devoted himself, after graduating in medicine, to the practice of surgery. He rendered important service to his country, when, after the famous manifesto of June 16, 1809, she entered on her struggle for independence. His treatment of the wounded, particularly his operations on the field of battle, won him high distinction. He also earned signal honor in the combatant ranks. This parallels the case of Dr. Holyoke of Salem, Mass., who practised his profession for upward of eighty years, his visit-books being still extant showing the record from beginning to end.

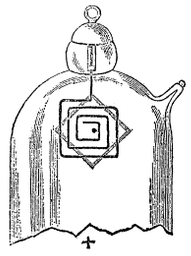
BACILLI ON A BALD HEAD. — Dr. Saymonne claims to have isolated a bacillus, called by him "bacillus crinivorax," which is the cause of alopecia. It is, he says, found only on the scalp of man, other hirsute parts of the body and also the fur of animals being free from it. The bacilli invade the hair-follicles, and make the hair very brittle, so that they break off to the skin. Then the roots themselves are attacked. If the microbes can be destroyed early in the disease, the vitality of the hairs may be preserved; but after the follicles are invaded, and all their structures injured, the baldness is incurable. The following is Dr. Saymonne's remedy to prevent baldness: Ten parts crude cod-liver oil, ten parts of the expressed juice of onions, and five parts of mucilage or the yolk of an egg, are thoroughly shaken together, and the mixture applied to the scalp, and well rubbed in, once a week. This, he asserts, will certainly bring back the hair if the roots are not already destroyed; but the application of the remedy, as *The Medical Record* well observes, must be very distressing to the patient's friends and neighbors.

ELECTRICAL NEWS.

ELECTRIC LIGHTING FROM PRIMARY BATTERIES. — The chromic chloride primary batteries of Commandant Renard seem to be enjoying some success abroad. Thirty-six cells of this battery are deemed sufficient to run a 300-candle-power arc-lamp, and it is claimed that a 900-candle-power arc-lamp can be run from 42 of these cells. The cost per candle-power hour is estimated to be about one-fifth of a penny. A number of primary batteries have been introduced in this country for the purpose of electric lighting, and much money has been spent in patenting and placing them upon the market. As far as we know, they have never realized an approach to commercial success.

ST. LOUIS ELECTRICAL EXPOSITION. — This exposition is being held at St. Louis, and is certainly a very attractive feature in that city just now. A number of prominent exhibiters are represented. Among the miscellaneous exhibits are those of the Writing Telegraph Company of New York, the Electric Date and Time Stamp Company of St. Louis, the Graphophone-Phonograph Company of New York, and the American Waltham Watch Company of Boston, Mass., to say nothing of other companies manufacturing miscellaneous devices. The parent electric manufacturing companies are well represented, both as to *personnel* and machinery. Besides apparatus of a strictly electrical character, one finds leather belting, steam-engines, feed-water heaters, water-wheels, wire, etc., which all are day by day assuming a closer relation to the electric-lighting industry. One of the most interesting exhibits is the electric welding apparatus shown by the Thomson Electric Welding Company of Boston. It is not generally known just how complete and satisfactory this process is, and the company are taking advantage of the splendid opportunity now offered them in St. Louis to show and do all varieties of welding-work in the exposition building. Another device that seems to be appreciated by ladies and practical-minded husbands is the electric heater of the Burton Electric Heater Company of Richmond, Va. This heater is in actual use, cooking beefsteak, eggs, etc.; the inventor taking this opportunity of showing just what electricity is destined to do in the way of culinary and general heating attainment. Almost every thing and every body electrical are represented, notwithstanding which fact the exposition cannot be said to equal that in Chicago on the occasion of the annual meeting of the National Electric Light Association last February.

VOLATILIZATION OF METALS. — A correspondent of the *Revue Internationale de l'Electricité* writes, "We have received from M. Gaston Seguy, who is not only a clever glass-blower, but also an intelligent observer, two samples of tubes in which the volatilization of metals in a vacuum by the passing of the electric current has given rise to some curious phenomena, which we are unable to explain satisfactorily. We therefore confine ourselves to submitting to our readers the result of these experiments, hoping that perhaps one of them will be able to indicate on what theory we can



base our facts. A glass tube three centimetres in diameter is closed at the two extremities, and to each end is soldered an electrode of platinum or copper of the form shown in the adjoining figure. Through a nipple on the side of the tube a vacuum equal to that of the Geissler tubes is produced by means of a mercury-pump; then the current of a powerful induction-coil (three-tenths of a metre spark at least) is passed through. The metal is then volatilized at the negative pole, and is deposited on the sides of the glass, producing a black discoloration for platinum, and yellow for copper. The metallization of the sides of the tube is more rapid in proportion as the diameter is smaller; but in any case it produces this curious phenomenon, to which we wish to call attention: it does not take place at all on either side on that part of the tube placed directly opposite the plane of the electrode, as we can easily see by placing the tube before a sheet of white paper. The reservation thus obtained exactly reproduces the external form of the electrode; but what is still more curious is, that the angles of this outline do not correspond to the angles of the electrode, but come opposite the straight lines, as shown in the accompanying figure. These are phenomena similar to those observed by Crookes, Jamin, and Goltein; and we think, that, in order to facilitate an explanation of them, it is better not to pass them by in silence, but, on the contrary, to note them with all their peculiarities every time we observe them."

NOTES AND NEWS.

ON Friday evening, Sept. 6, the Nevada Academy of Sciences held its first working meeting, upon which occasion Gen. C. W. Irish read a very interesting paper on "The Air-Currents of Western Nevada." The officers of this new scientific society are, president, Gen. C. W. Irish, surveyor-general of Nevada; vice-president, C. W. Friend, director Nevada State Weather Service; secretary, Professor R. D. Jackson, State University; treasurer, J. Rankin; executive committee, the president, secretary, and the following, — Dr. LeRoy D. Brown, State University; Professor W. McN. Miller, State University; and E. M. Van Harlengen.