they must keep in line with them. She granted that the centre of women's sphere is the home—but its circumference is the wide world over. Wherever there is want and suffering, misery and oppression —there is woman's work and woman's sphere. She strongly advocated the suggestion of bringing together in quinquennial Congresses the women of every nation; nothing would break down the barriers between nations more effectually, or sooner teach the great Christian lesson that the drawing together of the human family is the highest and noblest work women can do. She looked forward with great hope and confidence to the good results which would accrue to humanity at large by the formation of these National Councils of Women.

Mrs. Roberts-Austen said: Mrs. Fenwick has said, we must not limit work, and I heartily agree with her. This world, at least so far as human beings are concerned, is, we are told by scientific men, only beginning; who are we, to limit the work of men or women? That must be left to God and His servant, Nature. One thing more I should like to say before closing this meeting—it is that we most earnestly hope that this movement, which makes for greater freedom, greater responsibility, more serious aims in life for women, will also give them that higher dignity and true self-respect which is still so sadly lacking in men and women alike.

Mrs. Austen then invited questions from those ladies present, to which Mrs. Fenwick replied. It was announced that the positions of Hon. Officers to the Council had been accepted by the following ladies:—President, Lady Henry Somerset; Vice-President, Lady Frances Balfour; Hon. Secretary, Mrs. Bedford Fenwick; Foreign Corresponding Secretary, Mrs. Eva McLaren. Miss Louisa Stevenson of Edinburgh had been nominated for the position of Treasurer.

It was further announced that a meeting to place the aims of the National Council before the public would be held, at 7 p.m. on the 24th of February next, tickets for which could be obtained upon application from the Hon. Secretary, Mrs. Bedford Fenwick, 20, Upper Wimpole Street, W., and who would also be glad to forward all information concerning the National Council of Women to those interested in the subject.

Science Notes.

PASTEUR'S EXPERIMENTS.

Among Pasteur's earlier experiments were those to prove that spontaneous generation of living beings did not occur. Some short account of them has already been given in this column. Pasteur showed that a putrescible fluid, if sealed in a flask after prolonged boiling, and while still almost at boiling point, does not suffer decomposition. Similarly, a putrescible fluid may be kept for years unchanged if it is boiled and kept in a flask unsealed, but with a long sinuous neck. These experiments are remarkable both for their exceeding simplicity and their tremendous importance. Well may Dr. Sims Woodhead, in reviewing Pasteur's work, say that it seems to-day almost incredible that little more than twenty years ago the theory of spontaneous generation should have been fully accepted. He adds that Van Helmont's evolution of mice from a pot charged with corn and stuffed with a dirty shirt, and the latter's statement that the smells which arise from the bottom of morasses produce frogs, slugs, leeches, grasses, and other things, are now looked upon as scarcely more extraordinary, although they date back a couple of hundred years.

All Pasteur's later researches, which have proved so invaluable, naturally follow from the earlier experiments. There is one aspect of the question of infectious disease about which we know very little, and that is, what it is that confers immunity from certain infectious diseases on individuals or on races of animals. Perhaps the most definite item of knowledge we possess concerning this matter we owe to Pasteur. He found that the anthrax bacillus would grow readily in certain animals, the ox, the sheep, the guinea-pig, not so readily in the dog, and not at all (under normal circumstances) in the domestic fowl. He also found that a temperature of 111·2° F. rendered the anthrax bacillus incapable of developing. The temperature of the blood of birds is higher than that of mammals; in the case of the domestic fowl it is about 105·8° to 107·6°. It occurred to Pasteur that this high temperature might be responsible for the immunity of the fowl from anthrax. In order to test the matter he kept a hen with its feet in water maintained at a temperature of about 77°, until the blood of the bird came down to the normal temperature of the human body. The subject of this experiment, having been previously infected with the anthrax bacillus, developed splenic fever and died within twenty-four hours. In confirmation of the above result, another experiment was made on the same lines, but when the fever was at its height the hen was taken out of the water, wrapped in cotton wool, and kept warm. It speedily regained its strength and completely recovered, inasmuch as such a hen showed no trace of anthrax organism in the blood.

Many of Pasteur's experiments are so simple, and yet so absolutely conclusive, that one is irresistibly reminded of the definition of genius as an infinite capacity for taking pains.

Notes on Art.

THE WATER-COLOURS IN PALL MALL

This Exhibition is in all respects inferior to the summer show, for which, I presume, the Members and Associates reserve their best efforts.

Mr. Callow appears, if one may be permitted to say anything so rude, to have sent the gleanings of his studio. Of all his seven contributions not one bears the stamp of his usual power and originality. And it is the same with Mr. Wilmot Pilsbury, who contributes no less than eleven subjects. Several of his are, of course, pleasing—he hardly knows how to be anything else—but they are not noticeably good, which we expect of him pretty equally as a matter of course.

The chief honours are carried away by two of the great living masters, better known as a rule by their

previous page next page