

MEMORIAL TO COLONEL E. F. HARRISON.

A MEMORIAL to Edward Frank Harrison, C.M.G., Lieutenant-Colonel, R.E., who became Director of Chemical Warfare just before his death in 1918, has been placed in the Examination Hall of the Pharmaceutical Society of Great Britain. It takes the form of a portrait medallion in bronze relief, the design of Miss P. Blundell, and is set in an alabaster tablet, the inscription beneath simply records the name and distinctions of this gallant officer. The memorial was unveiled on November 2nd, within two days of the third anniversary of Harrison's death, by the Secretary of State for War (the Right Hon. Sir L. Worthington Evans, M.P.). The brief proceedings were presided over by Mr. E. T. Neathercoat, President of the Pharmaceutical Society. Among the large company present were Sir Anthony Bowlby, Sir Almeric Fitzroy, Sir W. Glyn Jones, Sir W. H. Horrocks, Sir Herbert Jackson, Major-General Sir C. E. Pereira, Sir Robert Robertson, Sir William Tilden, Sir Dawson Williams, Editor of the BRITISH MEDICAL JOURNAL, and Dr. Alfred Cox, Medical Secretary of the British Medical Association. Mr. Harrison did much work for the Association, including the analyses for the two volumes *Secret Remedies* and *More Secret Remedies*.

The President of the Pharmaceutical Society said that the cost of the memorial had been defrayed out of a fund raised by the Pharmaceutical Society and the British Pharmaceutical Conference. The remainder of the fund would provide for the award of an annual memorial medal in silver, and a presentation of books or apparatus, to the author of the paper, being a pharmacist of not more than five years' standing, deemed to be the best contribution of the year to the chemistry of drugs. Harrison was registered as an apprentice or student of the Pharmaceutical Society in 1884. After a very distinguished career as a student he qualified as a pharmacist in 1891, and afterwards took the Honours examination and qualified in pharmaceutical chemistry. Eventually he established himself in analytical practice. One of his most conspicuous services to the Society and to pharmacy in general was in the production of the two editions of the *British Pharmaceutical Codex* in 1907 and 1911, a work which has been recognized as a standard dispensatory for the use of medical practitioners and pharmacists. In 1915, at the age of 47, Harrison joined the Sportsmen's Battalion as a private, and after going through the usual training was transferred to the Royal Engineers; he soon became a leading spirit in the anti-gas campaign. It was mainly as a result of Harrison's zealous research and his co-ordination of the work of his subordinates that in 1916, after various other devices had been tried, the small box respirator was produced, which was afterwards manufactured to the number of twenty millions before the war came to an end. Harrison's death was due to pneumonia, to which he had no doubt been predisposed by exposure to gas in the course of his experiments.

The Secretary of State for War, before unveiling the memorial, spoke of the help the War Office had always received from pharmacists, and mentioned that he was at the moment awaiting a report from a committee, on which three of the most distinguished members of the Society were serving, on a question of great importance to the medical service and therefore to the fighting efficiency of the army. The work and devotion of Colonel Harrison had had perhaps a more direct and visible effect in safeguarding his comrades in battle than the work of any other single individual. There were many present (a reference to the guard of honour which surrounded the hall as well as to the younger men in the audience) who owed their lives to him. The problem which Colonel Harrison was called upon to solve was one of the most dramatic in warfare. He had to provide in the middle of a war an armour which would be proof against a new and sinister weapon deadly to a degree hitherto unthought of. It was a task Colonel Harrison's scientific attainments rendered him peculiarly adapted to undertake. Moreover, it was a task of chivalry, and in Colonel Harrison chivalry found its true knight. It was said in honour of the ancient kings that they killed their thousands. It would be Harrison's memorial that he saved his thousands, for not a man was sent to the front in the later years of the war who might not have to depend at some moment upon

the result of his skill and knowledge. Science was a double-edged weapon, and it was impossible to be sure that future discoveries would not be put to deadly use by a desperate enemy. Science had turned the poisoned arrow of the savage into the poison gas of civilization, and it might devise weapons deadlier still. However much we might deplore their use we must be ready, if not to use them in return, at all events to meet them, and it was on this account that the soldier's need for science grew continually greater. Colonel Harrison had the knowledge and he used it, and it was a solemn pleasure to unveil a memorial to a man who was a great patriot and a great pioneer. The Minister then withdrew the Union Jack by which the medallion had been covered, and the sounding of the "Last Post" by a party of trumpeters, while the guard of honour stood at attention, closed the simple ceremony.

SUBTROPICAL ESCULENTS.

THE BRADSHAW LECTURE.

THE Bradshaw Lecture was delivered at the Royal College of Physicians of London on November 3rd, by Dr. M. C. Grabham of Madeira, on the subject of "Subtropical esculents." The following is an abstract of his remarks.

It is not within the scope of this lecture to discuss the general standards of nutrition which in their present degree of acceptance relate to essential or accessory foods, but rather to bring before the College the knowledge acquired during a long experience of the animal and vegetable esculents produced in the subtropical climate of Madeira and the other Atlantic islands. I know from the constant applications made to me at Madeira for help and advice in disseminating and transplanting from regions widely apart in our vast empire, that we are fully alive to the present need of utilizing our dormant resources.

Dealing first with vegetable esculents, I propose to select such examples as may best illustrate the growing importance of the food, vital and accessory, with which we can supplement our own home productions for the maintenance and well-being of our constantly increasing race.

The common custard apple, *Anona cherimolia*, grows abundantly in Madeira, and is exported to England in ever-increasing quantities. It has a sweet, creamy, vinous taste, rich and juicy, and is destined to rival the banana in prevalence and abundance when the public taste and demand have developed.

Nasturtium officinale, the common watercress, occurs in every mountain stream, and is largely used as an ingredient in both Spanish and Portuguese soups. Eaten in bulk it is held in high repute in the treatment of gout and rheumatism, and I have seen marked advantage derived from its use in these maladies.

Brassica oleracea, in ever-increasing variety, is an essential ingredient in Spanish and Portuguese cooking, and acquires in these latitudes a coarse, strong flavour, from which only the savoy and cauliflower varieties are conspicuously exempt.

The mango, though comparatively rare in the Canary Islands and Cape Verde, is very common in Madeira; the oval, yellow and pink flushed fruit abounds with a rich, nectarine-tasting juice, not free from a carrot-like suggestion, and finds a ready sale in London during October and November.

The orange in every variety is found in all the Atlantic islands, varying in quality, the juiciest and best flavoured being those which come from a restricted area in Grand Canary Island, but their skins are too thin and delicate for commercial exportation. The orange, however, bears transport from far distant regions and is not hurt by cold storage, hence there is no lack of it in English markets.

The lemon, matchless in size and flavour, is found in all the Atlantic islands, while the Madeira citron has a world-wide fame and commercial importance.

The vine, which is commercially negligible further south in the northern Atlantic, is now assuming its proper place in Madeira; every grape of importance is to be found there and the crop is entirely devoted to the winepress.

The lupine is extensively grown in many of the Atlantic islands, both as a vineyard and field crop; the lentil is also found extensively, and forms an important adjunct to the local pottage; while the small early variety of broad bean is generally found in all the islands and at all elevations. As with the broad bean, the better sorts of pea