FEBRUARY, 1936

GOD SAVE THE KING.

At a special meeting of the Privy Council held at St. James's Palace on January 21st, King Edward VIII was "with one voice and consent of tongue and heart" formally proclaimed King of these Realms.

he declared that one of the objects of His life would be to uphold constitutional government. In this I am determined to follow in My Father's footsteps and to work as He did throughout His life for the happiness and welfare of all classes of My subjects."

On the following day, with stately and picturesque ceremonial His Majesty's Accession to the Throne was proclaimed in London, and throughout the Empire, and he was acclaimed "our only lawful and rightful Liege to whom we do acknowledge all faith and constant obedience with all hearty and humble affection, beseeching God, by whom Kings and Queens do reign, to bless the Royal Prince Edward VIII with long and happy years to reign over us."

MARY'S MESSAGE OF DEEPEST QUEEN GRATITUDE TO THE NATION AND EMPIRE.

The following message to the Nation and Empire from Queen Mary has been issued for publication :-

I must send to you, the people of this Nation and Empire, a message of my deepest gratitude for all the sympathy with which at this time of sorrow you have surrounded me. It is indeed a gratitude so deep that I cannot find words to express it. But the simplest words are the best. I can only say with all my heart I thank you.

In my own great sorrow I have been upheld not only by the strength of your sympathy but also by the knowledge that you have shared my grief. For I have been deeply moved by the signs so full and touching that the passing of my dear husband has brought a real sense of personal sorrow to all his subjects. In the midst of my grief I rejoice to think that after his Reign of twenty-five years he lived to know that he had received the reward in overflowing measure of the loyalty and love of his people.

Although he will be no longer at my side—and no words can tell how I shall miss him-I trust that with God's help I may still be able to continue some part at least of the service which for forty-two years of happy married life we tried together to give to this great land and Empire. During the coming years with all the changes which they must bring, you will I know, let me have a place in your thoughts and prayers.

I commend to you my dear son as he enters upon his Reign, in confident hope that you will give to him the same devotion and loyalty which you gave so abundantly to his father.

God bless you, dear people, for all the wonderful love and sympathy with which you have sustained me. MARY.

RADIATION AND RAY THERAPY.

(Concluded from page 5.)

By MISS ISOBEL HUTTON, B.A.Lond., S.R.N.

GENERAL EFFECTS OF ULTRA-VIOLET RADIATION UPON THE BODY AND SOME DISEASES BENEFITED BY IT.

The skin, it must be remembered, is not only a covering for the body, it is also a very important organ regulating metabolism, and, as it is chiefly upon the skin that radiation is applied, it follows that whatever results are obtained must be due to the absorptive powers of the skin and the transformation by it of radiant into chemical energy. The short waved rays, as already stated, are destructive to bacteria of all kinds, even spore-forming germs being susceptible, but, unfortunately, these rays have very little penetrating power. Bacteria on the surface of the skin, or of an ulcer or wound, are killed by the direct radiation, but those that lie deeper owe their destruction rather to the increased blood supply to the affected part brought about by the incidence of the longer-waved rays on the skin.

The following is a list of the effects produced by ultra-violet radiation upon different systems and on the body as a whole.

I. In the skin itself certain marked changes take place of which the most striking are the following:-

1. The production of an erythema a few hours after exposure, which may persist for a week or more. This is due to the increase in the vascularity of the skin which is one of the most noticeable effects.

2. Pigmentation. This is due to the formation of melanin granules in the protoplasm of the epithelial cells which act as an effective screen to protect the nuclei of the cells from any harmful effects of irradiation.

3. Improvement of the skin tone and functions such as transpiration and heat regulation.

4. Increased esophylaxis (anti-body forming function of the skin).

5. Production of vitamin D from the cholesterol in the skin.

II. The blood shows certain changes of which the following are some :---

1. Increase in the number of red blood cells and in the hæmoglobin content.

2. Lymphocytosis and leucocytosis.

3. Reduction of excessive blood pressure.

4. Increase in the bactericidal power of the blood.

5. Increase in the number of blood platelets.

6. Increased content of calcium, phosphorus, iron and iodine. The increase in the calcium content is very important and is due to the fact that the vitamin D produced in the skin enables the blood to absorb more calcium from food.

The osseus system shows an increase in calcium III. under the influence of ultra-violet irradiation.

IV. The central nervous system is affected in some undefined manner so that there is marked mental stimulation. On the peripheral nervous system, on the contrary, ultra-violet light seems to have an analgesic effect, which it shares in common with the blue rays of visible light. When a blue uviol glass filter is applied to the Q.M.V. lamp it eliminates entirely the heat and the short ultra-violet rays, and the remaining radiation

Queen Mary wishes to express Her-sincere gratitude to all those who have so kindly sent tributes of flowers in memory of His late Majesty.



