## OUR PRIZE COMPETITION.

WHAT ARE VARICOSE VEINS? HOW ARE THEY CAUSED, AND HOW TREATED?

We have pleasure in awarding the prize this week to Miss M. Ramsey, S.R.N., Enmore Road, South Norwood, S.E.

## PRIZE PAPER.

Veins which are irregularly enlarged are spoken of as varicose. They have become stretched and dilated out of proportion to the amount of blood they have to carry. Certain veins in the body, from their position, are specially liable to become varicose. These are the veins about the rectum which give rise to hæmorrhoids; the veins of the testicle, producing varicocele; and the internal saphenous vein, with its branches on the inner side of the leg, knee, and thigh. Again, in a lesser degree, small veins are apt to become varicose here and there on a mucous membrane that is the seat of chronic catarrh and congestion; these tiny enlarged veins are found specially on the mucous membranes of the throat and stomach, and occasionally give rise to serious hæmorrhage, particularly in chronic alcoholics.

Causes.-The tendency to varicose veins is often hereditary, and some people are more liable to their formation than others. The veins vary in thickness in different persons, and at different parts of the same vein, so that the formation of the vessel wall and the general condition of surrounding parts have much to do with its dilatation. Any condition which impedes the return of blood, such as pressure on the veins above, or which tends to weaken the walls of the veins, will cause an enlargement of the vessel, especially at those points where the wall offers the least resistance. Employments which cause long-continued standing with scarcely any muscular exertion, not only throw a great strain upon the veins of the leg, but fail to provide the pumping action that the muscular contractions exert in emptying the veins. The evil effects of prolonged standing are increased by wearing tight garters and by constipation. Pregnancy is another common cause of varicose veins, though the condition usually disappears after the birth of the child.

When a vein begins to dilate, the walls become thinner and the valves useless. Not only do they become stretched from side to side, but the veins also become twisted and lengthened. The skin over the affected area is apt to become irritated and may give way, when a varicose ulcer results. As the weight of the column of blood in the limb presses down with increasing force, the condition tends to grow worse

and to spread into neighbouring veins. These are liable to burst, with consequent venous hæmorrhage.

Treatment.—This is directed towards assisting the return of venous blood from the limb, and removing any source of pressure, when such is the cause. Treatment which is directed merely towards checking their increase and preventing the formation of ulcers is known as *palliative* treatment, whilst the removal of the enlarged veins is *radical* treatment.

Palliative Treatment.—Generally some form of support is enough; also avoid the use of garters, remedy constipation, and avoid unnecessary standing; rest with feet elevated, when possible. With regard to the best form of support, some persons prefer elastic stockings, others crêpe or rubber bandages. This should be removed last thing at night and reapplied before putting the feet to the ground in the morning.

Radical Treatment.—Usually advised when excessive dilatation is present. The dilated portions are removed, but various methods are used. The wound usually heals quickly, and the cure is often complete.

Miss K. Matthews gives as the causes of varicose veins: (1) Tumour; (2) constipation, pressure within the anus; (3) tight pressure over a vein, *i.e.*, a garter; (4) diseases of the heart; (5) long standing or sitting; (6) pregnancy.

Miss Allbutt writes : "If massage be ordered it should be directed to increase the circulation of the other veins and give relief to those which are dilated and painful. The varicose veins should receive *very* light treatment (if any at all); over-pressure might injure and might cause complications, such as inflammation, the formation of a thrombosis, or the bursting of a vein. Gentle movements are given with the endeavour to stimulate the muscular coat."

Miss M. G. Bielby says: "In most cases a congenital weakness in the vascular system is present, which may be hereditary. . . Undoubtedly tight-lacing practised by our immediate ancestors was a factor in this congenital defect.

"A powerful contributing cause is alcohol, even by moderate use, since it results in dilatation of the blood-vessels, and consequent congestion; degeneration of the walls by fibroid thickening, leading to lack of elasticity and contractility, inevitably followed by a delay in the blood current, and venous stasis. The action of the heart becomes impaired, and this



