

She is gaining experience years ahead of her civilian opportunities. The urgent need for nurses continues to be critical . . . the Army Nurse Corps appeals to all qualified nurses to join NOW.

#### POST-WAR ADVANTAGES FOR ARMY NURSES.

In connection with the present drive for Army Nurses, attention is drawn to the great post-war advantages being gained by Army Nurses—priceless experience that will put them in the foremost ranks of their profession after the war.

#### HEAD-WOUND GAS MASK NOW IN PRODUCTION.

A gas mask to protect head wound patients from war gas has been developed by the Chemical Warfare Service at the request of the Medical Department, and is now in production, the War Department has announced.

The mask is the first such device especially designed to protect patients with bandaged heads, faces, or jaws. It consists of a silk-like plastic hood to which an air-purifying canister and an outlet valve are attached. A flexible window across the eyes provides clear vision. Air is drawn into the mask by the ordinary breathing of the wearer.

The mask is pulled over the head like a sack, and experiments at the Medical Research Laboratories have shown it to be comfortable to the wearer as well as efficient.

### WHEN IT RAINED.

It was raining. Fat grey clouds bellied and shook as if with laughter as they rolled over the hills and down into the valley to a better position to empty their contents on the sodden tents below.

A few waterproofed and gum-booted figures walked delicately through the clutching mud, across treacherous rotund bamboo bridges or along slipping duck-boards, concerned not so much with keeping dry—for that was impossible—as with keeping upright. On these occasions poor mortals pay the penalty of man's presumption in choosing two legs for propulsion, four would make it so much simpler.

Bearers huddled in the questionable sanctuary of two propped up pieces of corrugated iron and bhisti's here and there masked in sacking tended languid salamanders. The sweepers had taken cover with their wares and were not visible.

A V.A.D. struggled to the second tent on the surgical side laden with M/B tablets, etc., for the medicine round. A nursing Sepoy met her at the flap and an earnest conversation took place inside the tent.

He explained his patients' needs, and they were urgent. Together they turned and shouted "Sweeper" at the falling rain.

"Sweeper, sweeper, sweep—er," in concerted crescendo their voices rose, but nothing living stirred.

The V.A.D. turned and spoke urgently and authoritatively to the Sepoy, speculation and doubt in her eyes. Would he or would he not refuse to do her bidding?

He gave one more call "Sweeper" without result, and with the deft grace of a strip-tease artiste stepped out of his tunic and shorts. He grasped a large black umbrella and, clad in field boots and gaiters, forage cap, identity disc, and a pair of diminutive rainbow pants, stepped delicately out into the rain and brought that which his patients required.

The V.A.D. was speechless with surprise until his mission completed, he resumed his clothes.

"But why take them off?" she asked.

"I did what the mem sahib requested," he replied with dignity. "But I could not get my clean linen wet, that was not requested," and adjusted his cap to a more jaunty angle.

## PENICILLIN.

### SYSTEMIC ADMINISTRATION.

In the valuable article on Penicillin distributed by the Ministry of Health, we in our last issue published "Indications for its use and Methods of Administration."

I. *Systemic administration*.—Either the sodium or calcium salt may be used.

(a) *Intramuscular injection*.—15,000 units dissolved in 2-3 c.c. of sterile water or saline are injected every three hours throughout the day and night. This method is simple and effective, but many patients find it difficult to tolerate on account of the pain produced.

(b) *Continuous infusion* by "drip" of 100,000 to 120,000 units daily into a muscle or vein. The drawback of the intravenous route is the high incidence of thrombosis; otherwise this method is very satisfactory. The main drawback of the intramuscular route is discomfort, and the development of local oedema when large amounts of fluid are given. This does not occur if special equipment delivering 100 c.c. in 24 hours at a constant rate is used. The apparatus required is comparatively simple and this method of administration is preferred by many.

(c) *The duration of treatment* varies considerably according to the condition and response of the patient, but should seldom be for less than five days or more than 12 days. Treatment is usually continued for about two days after a favourable response has been obtained.

(d) *The dosage* described above is recommended for all conditions requiring systemic treatment except the following:—

(1) Syphilis: 240,000 units daily for 10 days has been recommended.

(2) Gonorrhoea: in uncomplicated cases a total of 100,000 units given in one day is usually effective.

(3) Bacterial endocarditis: a daily dose of 240,000 units has been recommended, but even prolonged treatment may be unsuccessful.

(4) Actinomycosis: the dosage varies considerably according to the sensitivity of the actinomycetes.

(e) *Toxic reactions*.—Pure penicillin will probably prove to be virtually non-toxic, but penicillin as used at present contains impurities which occasionally give rise to minor reactions, such as fever, and urticarial rashes.

II. *Local Application*.—When applied locally, penicillin must be brought into contact with the infecting organism. Merely to apply penicillin to the surface of an infection of considerable depth, such as a boil or carbuncle, is to waste time and penicillin.

(a) *Solutions* in sterile water or saline of 250 units or more per c.c. are used for local treatment. The solutions may be used for injecting through tubes stitched into wounds after closure, or through a needle into abscess cavities after aspiration of pus. The injection should be made twice daily. Irrigation of an open wound is ineffective.

*Burns* of the face may be sprayed, but penicillin creams are usually preferred for burns in other areas.

In *meningitis* a strength of 1,000 units per c.c. is usually used, and from 5-10 c.c. are usually injected daily by lumbar or cisternal puncture. (The purer the penicillin, the less likely it is to produce meningeal irritation.)

In *empyema* 26,000 to 75,000 units in 50-100 c.c. is injected every day or on alternate days into the pleural cavity.

For *infections of the eye* drops of 500 to 2,000 units per c.c. may be applied every half to two hours.

(b) *Powders*.—Penicillin (preferably the calcium salt) is

[previous page](#)

[next page](#)