

## OUR PRIZE COMPETITION.

WHAT ARE THE PRINCIPAL BITING AND STINGING INSECTS? WHAT DISEASES DO THEY CONVEY, AND WITH WHAT PREVENTIVE OR REMEDIAL TREATMENT ARE YOU ACQUAINTED?

We have pleasure in awarding the prize this week to Mrs. G. Firth Scott, 231, Ladbroke Grove, W.

### PRIZE PAPER.

Bees, wasps, hornets, some ants; lice, fleas, bugs; mosquitoes and various flies; cockroaches and some beetles.

Bees, wasps and hornets produce painful sometimes dangerous stings. The bee sting is hooked, and remains in the wound until expressed. When the sting is out, apply a clean pad soaked in carbolised oil, liquid ammonia, or a paste of equal parts bicarbonate of soda and sal volatile. If swelling and inflammation spread consult a doctor.

Ant stings, which contain formic acid, can be neutralised by alkalis as above. A paste of fine wood ash and water can be used if none of these remedies are available.

Lice cause intense irritation by sucking and burrowing into the skin. "Bird lice" sometimes bite the skin of human beings also. Carbolised oil, sulphur ointment, carbolic compresses are useful, but the main object must be the eradication of the pediculi. Clothes which have been in contact with a verminous person must be stoved, hair should be shaved if infected, and the skin cleansed thoroughly. Lice convey typhus fever.

Fleas.—The most interesting, perhaps, from the medical viewpoint, is *Pulex Penetrans*, which is found in sandy soil in Africa and South America. This flea burrows under the nails (usually toe nails), and produces an irritant septic sore and an ulcerating joint.

Kerosene, Carbolised Oil, or Ammonia may deter them. *Pulex Irritans* is the ordinary flea found in unclean human habitations. Cleanliness, and the local application of carbolised oil or eucalyptus will keep them away. It is interesting to note that fleas and bugs seldom bite vegetarians!

Fleas have been found to spread bubonic plague—rat fleas particularly—hence the campaign against rats instituted by the Ministry of Health.

Bugs inhabit old, dirty woodwork, walls, &c. Eradication by fumigation is the only real remedy, though petrol and kerosene appear to deter them. Some authorities believe they spread typhus fever.

Flies have long been known as carriers of infection. They may infect foodstuffs by carry-

ing particles of filth on their bodies, they may bite and infect directly, they may inoculate after a cycle of development. Typhoid, bacillary dysentery, *B. enteritidis*, summer diarrhoea, cholera, the ova of certain worms, and possibly anthrax may be conveyed by "carriers" such as the house-fly.

The tsetse fly (*G. palpalis*), and possibly other biting flies, convey human trypanosomiasis and sleeping sickness by direct inoculation.

Mosquitoes (*anophelinæ*) cause malaria in human beings. The infected mosquito discharges the "zygote-blasts" into the circulation of the vertebrate host, and after a definite cycle of development the malarial attack begins. Kerosene spread over malarial swamps is said to kill the mosquitoes. Dried and slowly burning "cow dung" will prevent mosquitoes entering the tent or room. It burns with an aromatic smoke. The intravenous injection of quinine bi-hydrochloride, by a doctor, is the best remedy.

Flies belonging to the genus *Stomoxys* transmit the disease known as infantile paralysis or acute anterior poliomyelitis.

Cockroaches (*blatta orientalis*) give slight bites, and their footprints cause irritation of the skin if they pass over it.

Various beetles bite, or rather cut with their mandibles. They are dirty feeders, and may convey acute sepsis by contaminating the wound with micro-organisms. Wash the wound immediately in an efficient disinfectant, and paint with iodine. If this is impossible, ligature on side nearest heart to prevent poison circulating, suck and expectorate the poison. Permanganate of potash crystals may be rubbed in. Dress wound with iodine and sterile pad till healed.

Midges, gnats and similar pests of a country walk can be kept off by smearing the legs and feet with cajput or eucalyptus oil before putting on the stockings. Ammonia and witch hazel are good for most stings.

Acarus (scabies), ticks, harvest-bugs, and biting spiders, are *not* insects.

### HONOURABLE MENTION.

The following competitors receive honourable mention:—Miss Mena M. G. Bielby, Miss Mildred W. Comer, Miss C. Wright, Miss Amy Turner, Miss Kate Martin.

### QUESTION FOR NEXT WEEK.

What changes take place in the nipples:—  
(a) during the first three months of pregnancy;  
(b) in the first seven days of the puerperium?  
Name the complications which may occur during the latter period.

[previous page](#)

[next page](#)