

Current Literature.

The Practical Value of the Ross "Thick-Film" Method.—W. M. James (*The Southern Medical Journal*, October and November, 1911) has contributed a paper which embodies the results of much work on an immense amount of material. Between January, 1905, and September, 1911, 41,000 cases of malaria were admitted to Ancon Hospital, Panama Canal Zone, in 58 per cent of which parasites were detected. W. M. James has increased the percentage of positive results to 94 by a five-minute's search in a thick film of blood which he thus prepares:—A drop of blood, larger than that which, when smeared, would cover the greater part of the slide, is spread on its surface until it makes a circle about three-quarters of an inch in diameter. About 7 c.mm. of blood is contained in the drop. Between forty and sixty leucocytes are seen in each microscopic field. It is useful to make two such smears on each end of the slide. A platinum loop, a pin, or the concave surface of a pen may be employed. The film should be made as evenly as possible. The slide is then placed on a flat surface, and allowed to dry. The name of the patient is scratched on the film with a fine point.

The slides are placed in methylated spirit, or spirit of wine, to which commercial hydrochloric acid has been added in the proportion of twenty drops to 100 c.c. The hæmoglobin is dissolved. Decolorization is complete in ten or twenty minutes, and the film resembles ground glass in appearance. No damage results from a longer stay in the acid alcohol, which may be used repeatedly. The slides are washed in running tap water for ten or fifteen minutes, insufficient washing prevents staining; they are then dried by blotting or exposure to air, but not by heat. Leishman's stain is poured on, and left for two or three minutes, so that it may penetrate the thick film. Distilled water is added; after a few minutes more distilled water is added, and five minutes later the preparation is diluted with distilled water, and washed in tap water until the washings are no longer blue but not taking out too much of the stain. The field appears pink, the cytoplasm of the parasite blue, and its chromatin red. The small ring forms are seen at many angles—sometimes only a chromatin dot and a speck of cytoplasm are visible. The larger tertian parasites appear as ragged masses of blue, in which red dots are scattered. These sometimes give rise to difficulty in their identification. Crescents, though shrunken, are recognized by their pigment and chromatin. Tertian gametes are easily seen. Quartan parasites are compact, their cytoplasm is dark blue. Presegmenting and segmenting forms present no difficulty in their detection. It is not possible to recognize the species of the ring forms. But if all the parasites in the film are rings, it is probable that the infection is æstivo-autumnal. In tertian and quartan ague larger parasites and gametes are generally present. By means of this thick-film method, plasmodia may be found in the blood for three or four days after the administration of quinine. In the tertian and quartan infections the parasites are most numerous about twenty-four hours before the acme of the fever, in the æstivo-autumnal, at the beginning of the apyrexia. Uncomplicated malaria does not cause ague attacks unless the parasites are present in the peripheral blood in numbers sufficient for their demonstration by the

thick film process. The degree of pyrexia is usually proportional to the number of plasmodia. In a continued fever, if malarial parasites cannot be found within the first twenty-four hours, and if there is no obvious cause for the pyrexia, enteric should be suspected, and blood cultures should be made. Even when parasites are present at the outset of a continued fever of three or more days' duration, the case should still be regarded with suspicion. Such fevers lasting five or more days are usually infectious, one of the typho-colon group of bacilli being present. Atypical cases which remain undetected are instrumental in the spread of these bacterial diseases. C. B.

Dysentery in Fiji.—Bahr, in Supplement No. 2 of the London School of Tropical Medicine, describes the results of his investigations on dysentery in Fiji in 1910. He finds that the majority of cases are bacillary in origin, though a few amœbic cases occur. The bacteria concerned are chiefly of the Shiga and Flexner types, but others, atypical as regards their cultural reactions, were found in a few cases. He states that the sugar reactions were variable and inconstant after long subculture. This does not appear to be borne out by his protocols, where only two out of the seven strains isolated show variation on subculture; one of them fermented saccharose and maltose when first isolated and lost these properties after seven months subculture, reverting to a typical Shiga. The other, which he labels type G, fermented mannite, lactose, maltose and dextrose, and formed indol when first isolated. After three months it temporarily lost its action on maltose, which it regained after four months, at the same time losing its reaction with lactose. He also says that agglutination tests with patients' sera proved neither constant nor reliable; 74 per cent gave a reaction in dilutions of 1:100 to 1:200, whilst 5 out of 80 patients who were not suffering from dysentery gave a reaction in 1:50. He attributes a large part of the spread of the disease to flies, and has succeeded in isolating Shiga's bacillus from the alimentary tract of flies caught in the dysentery ward; experiments went to show that an infected fly could carry dysentery bacilli in its gut for five days. Polyvalent anti-dysentery serum given intravenously gave the best results in treatment. In the amœbic cases, the organism was *Entamoeba histolytica*.

The report is prefaced by a history of dysentery in Fiji, written by Dr. B. Glanvill Corney. W. S. H.

Surgical Treatment of very Severe Dysentery.—Herrick (*Medical Record*, November 13, 1909), reports the results of eleven cases of very severe dysentery, in which he performed a right-sided colotomy. Four recovered, though all were apparently in a desperate state before operation.

W. S. H.

Bone Changes in Diagnosis of Leprosy.—Herrick and Earhart (*Archives of Internal Medicine*, June, 1911, vol. vii, pp. 801-811) describe the bone changes which occur in the digits in anæsthetic leprosy. The terminal phalanges are especially affected, though the other phalanges and even the metacarpal bones may be involved. The changes are of two kinds, one a gradual absorption of the distal phalanx from one end, the other a general thinning and absorption of the whole bone. The changes may appear quite early and are then of great help in diagnosis, being quite characteristic of the disease. W. S. H.

Acute Tropical Phagedænic Ulcer.—Schüffner (*Arch. f. Schiff. und Tropen. Hyg.*, 3 Bd. 16, 1912, p. 78) has not confirmed the favourable results with salvarsan reported by Werner in tropical phagedæna. This condition is associated with the presence of *Spirochæte schaudinni* and *B. fusiformis*, though it has yet to be proved that they are the causative agents. Unfortunately animal experiments have failed. Prowazek was unable to convey the infection to apes and orang-outangs by inoculating these animals with the discharges of the ulcers. Leber made unsuccessful experiments on the cornea of baboons. Schüffner himself has had only negative results. He has employed salvarsan in three cases. The remedy caused no improvement in any of them. He finds that tropical phagedæna is readily amenable to surgical measures. He cuts off the sloughs, without scraping the ulcer, applies lead lotion or hydrogen peroxide compresses every four or six hours. A change for the better will be visible on the following day. Occasionally he lightly cauterizes the surface with chloride of zinc. The base of the sore will be clean in four to six days, and healing will then progress rapidly.

Cammermeyer (*id.* p. 85) treats the subacute phagedænic ulcers of the Congo, known by the local name of "sarnes," by washing with water, painting with tincture of iodine and dusting with powdered secharlachroth, and applying dry dressings. Healing is rapid. C. B.

Salvarsan in Anthrax.—Schuster (*Münch. med. Woch.*, February 13, 1912, p. 349) has ascertained that the injection of salvarsan in a dose of 0.04 grm. per kilogramme of body weight will save rabbits from an otherwise fatal infection with anthrax.

Bettmann and Laubenheimer (*Deutsch. med. Woch.*, No. 8, 1912) have found that salvarsan protects guinea-pigs when injected up to twenty minutes after inoculation with anthrax. The animals which survive have not acquired immunity. They report two cases of anthrax in men which recovered under the administration of salvarsan. C. B.

Salvarsan in Yaws.—Strong (*Philippine Journ. of Science*, October 4, 1910) reports the cure of twenty-four cases of yaws by means of salvarsan. The average periods after the injection, before recovery was complete, was ten days. No recurrences or nerve sequelæ were noted.

Flu (*Münch. med. Woch.*, No. 45, 1911) has cured 700 patients suffering from yaws with "606." Recovery was so rapid that second injections were necessary in only six instances. There were three relapses. Four cases of "pian" which were of long standing and were rebellious to other remedies yielded at once to salvarsan.

Alston (*Brit. Med. Journ.*, p. 268, January 6, 1912) has employed intramuscular injections of 0.6 grm. salvarsan in 500 cases of yaws; 498 were cured: 409 with one; 75 with two, and 14 with three doses. There were five recurrences. No eye or ear complications were observed. C. B.

Salvarsan in Scurvy.—Tuschinsky and Iwaschensow (*Münch. med. Woch.*, December 12, 1911, p. 2671) have given "606" intravenously to eight scorbutic cases as Rumpel and Gerber have demonstrated the specific action of this remedy on the spirochætes of the throat in Vincent's angina, and Henke the same effect on saprophytic spirochætes. In the spongy ulcerated and bleeding gums of scurvy these micro-organisms are very numerous. The patients improved immediately. Bleeding from

the gums ceased and the mouth was in a normal condition in a week. The spirochaetes disappeared for a time, but subsequently they could be found in small numbers. Their reappearance was not associated with a relapse of the mouth ulceration. C. B.

Salvarsan in Malaria.—Weintraud (*Berl. klin. Woch.*, February 12, 1912, p. 325) relates a case of tertian ague which was cut short by 0.4 gm. "606" intravenously. Though doses of 0.4 and 0.7 gm. were again given, a relapse occurred in three weeks time which was uninfluenced by quinine. Two more doses of 0.4 gm. of salvarsan were administered with good effect. Ague attacks came on some weeks later which were cut short by salvarsan. He recommends that cases of ague which prove to be rebellious to quinine, should be treated by weekly injections of salvarsan.

Postempky (*Münch. med. Woch.*, 1911, p. 2693) has given salvarsan with benefit to five chronic malarial cases. C. B.

Salvarsan in Kaposi's Disease.—Sgambati (*Münch. med. Woch.*, 1911, p. 2693) has seen the cutaneous sarcomata of Kaposi disappear after two doses of "606." C. B.

The Wassermann Test in Tropical Diseases.—Schüffner (*Arch. f. Schiff. und Tropen. Hyg.*, H. 3, Bd. 16, 1912, p. 83) states that fallacies arise if a watery extract of syphilitic liver is employed. He recommends that an alcoholic extract of human heart should be substituted. Eighty per cent of the cases of tropical ulcer gave a positive reaction with the liver extract, but a negative one with the heart extract. In malaria 74 and 8 were the respective percentages, and in leprosy 78 and 22. Hence the watery syphilitic liver extract causes a high ratio of non-specific positive responses. C. B.

Wassermann Reaction in Lead Poisoning.—Hilgermann (*Münch. med. Woch.*, January 30, 1912, p. 274) has not obtained a positive Wassermann reaction in the blood of thirty-five cases of plumbism. He is thus unable to confirm the statements of Dreyer and Schnitter. C. B.

The Effects of Salvarsan on the Wassermann Reaction of Rabbits.—Emanuel (*Berl. klin. Woch.*, December 25, 1911, p. 2325) has tested the effect of salvarsan injections on the positive Wassermann reaction which so frequently may be obtained with the blood of normal rabbits. He finds that under the "606" a positive response changes to a negative. He therefore suggests that a negative reaction of the blood of an infected patient who has received salvarsan cannot be accepted as proof of the therapeutic value of the remedy without corroborative evidence. He alludes to the fact that the serum reaction in general paralysis of the insane may alter from positive to negative after salvarsan, though the course of the disease is unchecked. C. B.

Significance of a Negative Wassermann Reaction.—F. Müller (*Berl. klin. Woch.*, February 12, 1912, p. 326) states that a negative phase which may continue for twelve or fifteen months is no guarantee that recrudescences will not take place. There are instances in which the blood has responded negatively to the Wassermann test for one or two years, after which it has again become positive. C. B.

Wassermann Reaction in Mothers and Offspring.—Heimann and R. Stern (*Münch. med. Woch.*, January 23, 1912, p. 209) state that the Wassermann reaction is equally reliable in women whether they are pregnant or not. Blood tests have disproved the validity of Colles' and Profeta's laws. Colles thought that the mother of a syphilitic child often showed no signs of infection and that therefore she escaped. Profeta noted that the apparently healthy child of a syphilitic mother does not acquire the disease.

Reuben (*Arch. of Ped.*, June, 1911) has found that mothers with no specific signs, who give birth to syphilitic children have syphilis in the latent form, for the blood in 71 per cent of them gives a positive Wassermann reaction. Similarly he has shown that the blood test is positive in 99 per cent of the offspring of syphilitic mothers. C. B.

The Diagnostic Significance of the *Treponema pallidum*.—Hoffmann (*Deutsch. med. Woch.*, February 15, 1912, p. 313) dwells on the importance of examining not only primary but also secondary lesions for the presence of the *T. pallidum*, more especially when the Wassermann reaction is negative. He quotes a case in which excision of the sore and intensive mercurial treatment were apparently successful in aborting the disease, for the blood test remained negative. Nevertheless, three and a-half months after infection, mucous patches appeared on the tonsils and elsewhere in the mouth from which treponemata were obtained. It was not until several weeks later that the blood gave a positive response. In another instance, a woman was treated with salvarsan and mercury under which the Wassermann reaction became negative. Ulceration of her throat recurred in two months, while the blood was still negative. The detection of treponemata in scrapings from her fauces led to a correct diagnosis. A patient was suffering from a pustular eruption which was not suggestive of lues and had resisted specific treatment. The Wassermann reaction was negative, yet the true nature of the case was disclosed by finding the treponema in the rash. He thinks that negative results, if repeated often enough, are useful, for he was able to recognize cancer of the penis in its earliest stage in this way.

For the treatment of syphilis he recommends four or five intravenous injections of 0.4 gm. of salvarsan at five to seven days' interval, combined with thirty-six mercurial inunctions, or twelve salicylate of mercury injections. In late, neglected, or rebellious cases, he uses, in addition, calomel injections (0.05 gm.). Nerve affections may arise after the combined treatment, but they are less numerous than after salvarsan alone. He attributes them to a local reaction of a treponema focus in the nerve. Ehrmann and he have demonstrated treponemata among nerve fibrils, sometimes even before the outbreak of secondaries. They have shown by experiment that they are present in the blood three weeks before the beginning of the secondary stage. C. B.

The Combined Treatment of Syphilis.—Scholtz (*Deutsch. med. Woch.* February 15, 1912, p. 311) has employed salvarsan in a thousand cases of syphilis. He recommends that 0.6 to 0.8 gm. divided into two or more doses should be given intravenously. Mercurial treatment should be pursued with energy and another course of 0.6 to 0.8 gm. "606" should be begun three to five weeks after the first. He states that when the dose injected exceeds 0.4 gm., a not inconsiderable portion of the remedy is

excreted unchanged. Of seventy primary sores thus treated, sixty cures resulted, secondaries came on in seven, and the Wassermann reaction only became positive in the remaining three. In 122 early secondary cases, 89 showed no further signs and the blood reaction became negative. These were kept under observation from four to twelve months, 19 suffered from relapses, but in 7 of them treatment had not been sufficient. Of 72 cases of latent lues, in 64 the Wassermann reaction became negative. Out of 36 sufferers from tertiary lesions, 15 recovered. In seven of them the blood reaction continued positive, in spite of intensive treatment with salvarsan and mercury, though he states that the combined method is successful in converting a positive into a negative reaction in 70 per cent of all syphilitics so treated. He admits failure in checking symptoms or annulling a blood reaction in 9 per cent of primary, in 14 per cent of secondary, in 40 per cent of tertiary and in 5 per cent of latent syphilis. The period of observation ranged from four to sixteen months. He noted nerve sequelæ eight times in 375 cases. He considered them to be of specific origin, since they mostly disappeared under larger doses of salvarsan. C. B.

Poisoning by Wood-spirit.—Hirschberg (*Berl. klin. Woch.*, January 25, 1912, p. 247) gives abstracts of reports of the effects of drinking methyl alcohol. Three hundred cases of blindness and 150 deaths have been recorded. Eight grammes may cause optic atrophy in a few hours, while 30 grm. may be followed by death. Should an explosive outbreak of cases occur among the poorer classes who are accustomed to imbibe cheap spirituous liquids, in which the symptoms are syncope, vertigo, chilliness, sweating nausea, vomiting, abdominal pain, somnolence passing into coma, sudden loss of sight, dilated and fixed pupils, death in a few hours, then poisoning by methyl alcohol should be suspected.

Lewin (*Berl. klin. Woch.*, February 12, 1912, p. 309) states that methyl alcohol lowers the temperature of animals and causes fatal coma.

C. B.

Bacteria in Distilled Water.—Professor P. T. Müller (*Münch. med. Woch.*, No. 51, 1911) gives a short account of the results obtained in a number of samples of distilled water purchased at different chemists' shops in Gratz. He estimated the number of bacteria present by precipitating all the bacteria in 100 c.c. of the sample by means of a solution of oxochloride of iron. The precipitate was then stained with concentrated gentian violet, and centrifuged; the number of bacteria was estimated by microscopic examination of a portion of the precipitate. Altogether twenty samples were examined, sixteen of these were purchased in shops, and four were from distilled water prepared in the institute of hygiene. Müller estimated that the lowest bacterial content per cubic centimetre was 68,000, and the highest 6,050,000. This includes dead as well as living bacteria. Müller points out that according to the above results, in an intravenous injection of salvarsan, when 200 to 300 c.c. of distilled water is used, the number of bacteria injected would vary between 6 million and 1,500 millions. C. E. P.

Guaiacol in Typhoid Fever.—Lacroix (*Gazette Médicale de Paris*) advocates the use of guaiacol as an antipyretic in cases of typhoid fever with a high temperature. He recommends that a few drops of guaiacol should be painted over the front of the thigh, and a piece of jaconet fastened over the painted area. The patient's temperature should be

taken two hours later. He claims that the action of guaiacol is effective and safe, and that it does not cause any dangerous collapse.

C. E. P.

Extract from the Report of the U.S. Army Board for the Study of Tropical Diseases as they exist in the Philippine Islands, Quarter ending June 30, 1911.—By Major Weston P. Chamberlain, Medical Corps, U.S.A.; Captain Edward B. Vedder, Medical Corps, U.S.A.; Lieutenant John R. Barber, Medical Corps, U.S.A. (*The Military Surgeon*, No. 4, April, 1912).

“FURTHER STUDIES OF POLYNEURITIS GALLINARUM.

“As a result of the series of experiments, we were able to arrive at the following conclusions:—

“(1) Polyneuritis gallinarum is not prevented by adding to a diet of polished rice any of the following substances: potassium phosphate, potassium citrate, potassium carbonate, potassium chloride, magnesium phosphate, phytin, phosphoric acid, or phosphoric acid combined with potassium chloride.

“(2) The neuritis-preventing substance in rice polishings is soluble in cold water and in cold alcohol.

“(3) Polyneuritis gallinarum may be prevented by means of an extract of rice polishings containing only those substances soluble in cold water and cold alcohol. This extract, so far as at present known, has the following composition:—

Total solids	..	..	..	..	..	1.34	per cent.
Ash	..	..	..	..	..	0.03	”
Phosphorous pentoxide	..	..	..	..	..	0.00165	”
Nitrogen	..	..	..	..	..	0.0406	”
Sucrose	..	..	..	..	..	0.88	”

“(4) Multiple neuritis in fowls fed on polished rice is probably not due to lack of phosphorus compounds in the grain, as claimed by Schaumann, since out of each 1,000 parts of phosphorus contained in the rice polishings, at least 999 parts are not concerned in preventing neuritis.

“(5) The neuritis-preventing substance contained in rice polishings is capable of dialysis through a parchment membrane. This excludes all colloids from consideration.”

“THE FINDING OF A MARKED SHIFT TO THE LEFT IN THE ARNETH COUNT OF FILIPINOS.

“(1) Both Filipinos and Americans residing more than a year in the Philippines had a normal average number of white cells per cubic millimetre.

“(2) In both races the percentage of polymorphonuclear neutrophiles was much decreased below the minimum considered normal for white men in temperate regions.

“(3) Probably the polymorphonuclear neutrophiles are the only actively phagocytic cells in the circulating blood.

“(4) The average Arneth picture showed a marked shift to the left in the case of Filipinos, and a slight drift in the same direction for Americans resident more than a year in the Philippines.

“(5) A shift to the left in the Arneth count probably indicates a diminution in the phagocytic power of the blood in question.

"(6) From the first five conclusions, it will be apparent that the Filipinos show an actual absolute reduction in the number of polymorphonuclear neutrophiles (phagocytes), and that of this reduced number an abnormally large proportion are deficient in phagocytic power. In other words, the Filipino has absolutely fewer efficient phagocytes than are found among white men either in the Philippines or at home.

"(7) This reduction in circulating phagocytic cells may be a visible indication of a lowered resistance to infections on the part of native races.

"(8) No material differences in the differential count or the Arneht picture were observed between two groups of American soldiers, one group consisting of twenty-eight pronounced blonds, and the other group of twenty-eight pronounced brunettes."

Health of the Prussian Army (including the Saxon and Württemberg Army Corps).—A preliminary report for the period October 1, 1910, to September 30, 1911, has been published in the *Deutsche Militärärztliche Zeitschrift*, No. 6, 1912, from which the following notes are taken.

The ratio per 1,000 of strength, of admissions to garrison and barrack hospitals was 589.1; this shows an increase of 25.3 as compared with the preceding year. The principal increases were 4.9 in diseases of the alimentary tract, 8.3 in diseases of the organs of respiration, and 10.4 in the group of infectious and general diseases.

The mortality rate among patients undergoing treatment was 1.5 per 1,000.

The total number of deaths which occurred both in and out of hospital was 1,071 = 1.9 per 1,000 strength; this is an increase of 0.2 over last year's ratio. The ratio was made up of: Deaths due to disease, 1.2; deaths due to accident, 0.32; deaths caused by suicide, 0.43. Each of the three groups showed a slight increase over last year's figures.

The total number of men discharged from the army on account of physical unfitness was 22,314 = 40.4 per 1,000 of strength.

C. E. P.

Annual Report of the Bavarian Red Cross Society's Voluntary Aid Detachments, for the year 1910-11. (*Der Deutsche Kolonnenführer*, No. 24, 1911).—The number of voluntary aid columns is 185; the number of medical officers, 328; the number of active members (not including M.O.s), 8,988; the number of honorary members, 26,200

During the year thirty-seven men were trained in nursing in the military hospitals.

The preparations for mobilization in case of war have been steadily advanced, by the purchase of necessaries and by the revision of mobilization plans. In case of war the number of men available for duty on the L. of C. is 2,092, which includes 210 male nurses, and 87 men trained in disinfection work; there are also 1,304 for service in the home territory and 2,071 for duty at their places of residence.

The following units are organized and ready for service: *For L. of C.* eight sick transport columns with equipment and vehicles, five convoy sections and a depot section, two ambulance trains.

For the Home Territory. Two convoy sections and two half convoy sections are available, these have sixteen ambulance wagons, a large

number of tents, huts, cooking utensils and stretchers are also ready in store.

Preparations have also been made to afford assistance in case of disasters, epidemics, &c., occurring in the civil population during peace time. These arrangements proved of great value in the case of the conflagration in Teuschnitz, by which 201 people were rendered homeless. The society, on receipt of a telegram, dispatched by express train bedding for sixty persons, and £50 worth of food-stuffs.

All members of the voluntary aid columns are insured in the "Allianz" society against the risk of injury while employed on any voluntary aid training or in assisting the public; the premium paid appears to be Mk.0.28 (= 3 pence) per head per annum. [The compensation payable is not stated, but is probably that laid down in the (German) Employers' Liability Act.]

C. E. P.

The French Hospital at Fez.—*Le Caducée*, February 3, 1912, contains a short account of the French hospital established at Fez. The construction of a hospital was decided on in 1905. Dr. Murat, who had previously had considerable experience at Mogador, was selected as superintendent, and he was given £160 a year for hospital expenditure.

After much difficulty a site was obtained from the Sultan, and the sum of £800 granted for construction. By the exercise of economy and ingenuity Dr. Murat succeeded in establishing a hospital with twenty beds, operating room, out-patient room, bacteriological laboratory, &c.

The grant for current expenses was later on raised to £320 per annum; this is, however, only sufficient to pay for a very limited staff. Some 32,000 out-patients are treated during the year and roughly one-third of the beds are constantly occupied. The principal diseases are malaria, typhoid fever, dysentery and small-pox.

The heavy rains during last year left numerous pools which undoubtedly caused a great increase in the incidence of malaria. Typhoid fever is mainly due to the use of water from the Oued of Fez; the stream is remarkably pure at its source, but in its course through the plain of Sais it passes several villages where the water becomes contaminated with faecal matter. In places the stream forms marshes in which myriads of mosquitoes breed. By regulating its channel and enforcing some elementary sanitary laws both typhoid and malaria would be very much reduced, and the health of all in Fez would benefit.

The introduction of compulsory vaccination is also highly desirable.

C. E. P.

Voluntary Aid Detachments of the Red Cross Society, Rhine Provinces.—The following extract is taken from the report of the Annual General Meeting, held on July 2, 1911 (*Der Deutsche Kolonnenführer*, No. 2, 1912).

In the Rhine provinces there were, at the date of the meeting, 237 voluntary aid detachments with a total membership of 6,000. The number of detachments raised in each district was: Aachen, 19; Coblenz, 36; Cologne, 35; Dusseldorf, 99; Trier, 48.

In case of mobilization the following personnel was available:—

	FOR TRANSPORT		SICK ATTENDANTS.		DEPOT WORK	
	L. of C.	Home territory	L. of C.	Home territory	L. of C.	Home territory
Aachen	76	83	8	2	—	—
Coblenz	81	113	9	3	1	—
Cologne	231	136	32	2	2	2
Dusseldorf ..	455	596	27	21	8	3
Trier	182	261	53	13	7	7
Total	1,025	1,189	129	41	18	12

C. E. P.

Voluntary Aid Detachments in Germany.—Dr. Sigmund Merkel (*Der Deutsche Kolonnenführer*, No. 1, 1912) gives a description of the headquarters building erected by the Voluntary Aid Detachment in Nürnberg.

The building consists of a single-storied drill hall 93 ft. long by 49 ft. wide with a smaller class-room and a committee room alongside it; the latter are shut off by sliding doors. Another room is at present fitted up for refreshments and social intercourse, but can be used as a class-room. All the rooms are lighted by gas and warmed by patent stoves. A covered passage is used as a garage for an ambulance motor wagon. There are also rooms for the personnel on duty and a completely equipped operating room. A three-storied building adjoins the drill hall. The first two floors contain class-rooms, while the third is used as quarters for the Sisters of the Red Cross Society. The basement is fitted up as a workshop for members to practise the improvisation of medical and surgical equipment.

Another building has a similar workshop in the basement; the ground floor can accommodate eight ambulance wagons. On the first floor uniforms and mobilization equipment are stored. The second floor is used for keeping reserve articles and equipment belonging to the women's branch of the Red Cross Society.

In the courtyard there is a ditch and a hedge over which bearers are taught to carry loaded stretchers. There are also two disused railway goods vans for practising the fitting up of hospital trains. The Nürnberg detachment is a very strong one, hence the elaborate arrangement of its headquarters.

C. E. P.]

Sanitätskolonnen at Reviews.—*Der Deutsche Kolonnenführer* (No. 1 of 1912) published a letter from the German War Office giving permission for the men's voluntary aid detachments of the German Red Cross Society to take part in Imperial reviews. The privilege is restricted to those detachments which are organized to supplement the medical services in war and the men must be clothed as laid down by regulations. Provincial delegates of the Red Cross Society must communicate with the district Army headquarters, where the necessary arrangements will be made. Detachment banners will not be carried on parade.

C. E. P.