best advantage. For this reason the seasonal prevalence of malaria alters for the various parts of the country, depending on the time of the rains.

2. *Conditional.*—By this is meant the alterations of service conditions in the increasing or mitigating the contraction of the disease. This especially applied to Palestine, where the rapid advance into the highly malarious country of the Jordan Valley in the summer of 1918, accounted for a very great number of the total malarial cases. Unlike Salonica, Egypt and Palestine were not wholly malarious; and in Palestine, where the majority of cases occurred, the incidence seemed to depend on the movements of the troops from a camp where antimosquito measures had been effectively taken into a fresh unprotected and more highly malarious district.

Salonica itself is a highly malarious country, notably the Struma Valley, where many miles of marsh land render satisfactory antimalarial measures quite impossible owing to the enormity of the task. Another factor was that in this theatre of war the campaign was less progressive, so that the incidence depended for the most part on the climatic conditions. This is indicated in the following table, showing the number of cases and the percentages contracted on the three fronts during 1915 to 1919 inclusive. It will be noticed that the years 1916 and 1917 show the highest malarial incidence, which declined markedly in 1918. During the autumn of 1915 a few troops only were disembarked at Salonica, and no serious operations were attempted that year. The year 1916 shows increased activity. Large numbers of reinforcements arrived, and an advance was made into the Struma Valley. In this highly malarious part, the incidence during the summer and autumn months was very high. In 1917, more reinforcements arrived, and the advance, which had been held up for more than a year, recommenced. Monastir was recaptured, and fresh malarial country opened up. This year showed the maximum incidence. The incidence declined in 1918, when sanitary measures began to prevail, and more suitable country was occupied by the troops.

In East Africa the real offensive commenced with the arrival of General Smuts in the spring of 1916, and by the autumn of that same year the whole of German East Africa north of the central railway running from Dar-es-Salaam to Ujiji was freed from enemy forces. This part, though malarious, was not so highly infected as further south, where the next stage of the campaign was fought. This fresh country became the seat of operations in 1917, and the climatic conditions here, especially during the rains, could easily account for the marked increase of malarial cases. In fact, the climatic conditions were considered so deleterious that practically all European troops were replaced by Indian and East African native troops. This is probably the reason of the decrease in number for 1918, as only men from the British Isles are noted in these cases.

Palestine shows the most interesting figures. In 1916 the troops were advancing towards El Arish, in 1917 they were hung up before Gaza, and only in 1918 was made the big advance ending with the capture of Jerusalem and Damascus. It is generally observed that even in highly malarious countries stationary camps in time become fairly healthy, as modern sanitary methods have been found most efficient in combating the anopheles; stagnant water is either got rid of or treated, proper mosquito-proof beds and living rooms are constructed for the troops, and also the protective measures can be more easily enforced. The great advance took place early in 1918, and, once started, continued very rapidly. The troops had no time to take adequate protective measures against infection, suffering the more on this account. In addition, the country through which they were passing was highly malarious. Major Manson-Bahr, in describing the malarial incidence from *Laverania malariae* and *Plasmodium vivax*, shows that in the eastern sector from the Jordan Valley to Jerusalem, during the summer of 1918, the benign tertian epidemic commenced the beginning of June, and reached its maximum of 340 cases a week on July 13th. The malignant tertian epidemic commenced later and was very severe, reaching its maximum of 1,800 cases a week on October 12th. In the western sector from Jaffa to Ludd the benign tertian epidemic was the more severe, and reached its maximum of 850 cases a week on August 3rd.

It was followed by a less severe epidemic of malignant tertian, reaching its maximum of 600 cases a week on the same date as in the eastern sector.

	1915.		1916.		1917.		1918.		1919.	
	No.	%	No.	%	No.	%	No.	%	No.	%
Salonica ...	5	1.4	117	32.2	173	48.0	59	16.6	3	1.0
East Africa...	2	4.8	10	23.8	22	52.4	7	16.6	1	2.4
Palestine and Egypt	3	4.8	7	11.3	13	20.9	38	61.4	1	1.6

I have to thank Sir Lisle Webb, Chief Commissioner to the Ministry of Pensions, for his kindness in allowing me to publish these cases, and for some of the statistics supplied to me.

A NOTE ON THE SURGICAL USES OF THE FASCIA LATA.

BY

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THE extraordinary variety of injuries to all parts of the body which occurred during the war afforded to surgeons concerned in their treatment vast opportunities for exercising their ingenuity and invention. The application of the fascia lata to the repair of many of these lesions certainly received a great stimulus, and the results were on the whole eminently satisfactory. As one who, during the last eighteen months, has utilized fascia lata fairly extensively in different conditions, I venture to indicate some of its more obvious applications.

I. In the repair of, or as a substitute for, tendons and ligaments:

- Injuries in which there is loss of tendon substance, recent or old standing.
- In lieu of dividing and transplanting a healthy tendon, in order to reinforce a paralysed one, connecting these two by a fascial intermediary tendon.
- As a substitute for intrinsic or extrinsic articular ligaments—for example, the crucial (Hey Groves) and the internal lateral ligaments of the knee.
- As an auxiliary ligament—for example, in lieu of tendon fixation for a "dropped" foot—a Y-shaped fascial ligament may be employed; or in recurrent dislocation of the shoulder a fascial "sling" passed through the quadrilateral space may be used, or it may be passed through a hole drilled in the head of the humerus and the acromion process.

II. For clothing an area which has been deprived of its normal covering tissue.

- After the excision of adherent scars.
- In the abdomen, after extensive resections of the colon, to aid in "peritonization."
- In arthroplasties, interposed between the two raw bony surfaces (Murphy).
- As a sheath to protect a nerve suture.
- In gunshot or other injuries of the skull, where there has been extensive loss of substance of bone and dura mater prior to bone grafting.

III. To reinforce defects in the parietes of the chest, the abdomen, and of vessels.

- To cover in a lateral defect in a vessel wall.
- In repair of the urethra, after excision of stricture.
- In closure of faecal fistulae and ventral hernia, where parietes are deficient.
- In reconstruction of an intercostal space in hernia of the lung.

There are doubtless many other purposes to which this valuable tissue can be applied, and the above list only aims at giving some concrete idea of its scope.

Among the many little details that count towards success are the following: first, that the graft should be of

ample proportion and should be treated with the same respect as a bone graft; secondly, when used as a new ligament, the greatest care should be taken to imitate the anatomical attachments of its predecessor; and thirdly, that when used as a ligament, tendon, or to reinforce parietes, there should be no "slack" after suture is completed.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

INCUBATION PERIOD OF SCARLET FEVER.

In view of the fact that in accordance with "A Code of Rules for the Prevention of Infectious and Contagious Diseases in Schools," issued by the Medical Officers of Schools' Association, the incubation period of scarlet fever is given as "one to eight days, usually three to five days," I think, perhaps, the following instances in which the incubation period appears to have been ten days or more may be of interest. It may, of course, be said that they do not prove anything conclusively, but anyway they are in favour of the incubation period being longer than it is usually supposed to be.

1. Two children (M. and P.) travelled to a seaside convalescent home from London on February 9th with two other children who had recently been under treatment for scarlet fever. M. was taken ill with the disease on February 19th, and P. on February 24th. No other cases in the home on arrival.

2. Two children (T. and B.) travelled to a seaside convalescent home from London on February 2nd with a child who had recently recovered from scarlet fever. T. was taken ill on February 23rd, and B. on March 1st. Possible infection in the home.

3. Two children returned from their home to a private boarding school. The next day notice was received that a sister at home, with whom they had been in contact, had developed scarlet fever. The two children were immediately isolated, and developed scarlet fever, one nine days and the other ten days after returning to school.

4. A child was admitted to a private boarding school, and developed scarlet fever exactly ten days afterwards. So far as could be ascertained, there were no other cases in the school or neighbourhood.

5. In a convalescent home four cases of scarlet fever occurred under the following circumstances: F. C. arrived on January 27th, was taken ill on February 26th; E. D. arrived on February 3rd, was taken ill on February 22nd; F. C., an inmate, developed scarlet fever on February 26th; M. W. arrived on February 6th and was taken ill on March 12th.

6. In a convalescent home two children were taken ill with scarlet fever on July 31st; they arrived at the home, where there had been no other cases, on July 23rd; another child arrived on August 13th and was taken ill on August 22nd.

Broadstairs.

A. M. WATTS, M.D.

MEASLES, INTUSSUSCEPTION, AND APPENDIC-ECTOMY IN A BABY SEVEN MONTHS OLD.

A boy aged 7 months, breast-fed, was admitted into the Dorset County Hospital on November 29th, 1919. He had measles, but up to the previous day he had otherwise seemed well. On the 29th he passed a healthy motion early in the morning, and about 11 a.m. he seemed to be in pain. He vomited his feed at 1 p.m., and passed a green motion. He refused the breast during the remainder of the day, and had spasms of screaming and retching. At 7 p.m. he passed a blood-stained motion with mucus. Shortly afterwards he was admitted to the hospital.

On admission the patient was a well nourished child thickly covered with the rash of measles. A hard mass could readily be felt to the left of the umbilicus. Under an anaesthetic an incision 2 inches long was made over the swelling. A finger could follow the swelling towards the left iliac fossa, and after a little manipulation that portion of the descending colon containing the apex of the intussusception was delivered into the wound, and by gentle pressure below its lowest point the intussusception was reduced with surprising ease. As each portion of the bowel involved was dealt with it was returned into the abdominal cavity until the ileo-caecal valve was reached. The appendix, abnormally long, was for half its distal portion very dark in appearance—almost gangrenous—this apparently being due to its blood supply having been cut off. The appendix was removed. The caecum and ileo-caecal valve felt very thick and oedematous, and the peritoneal coat of the former was roughened. The child stood the operation well; there was no vomiting subsequent to the operation. He took his feeds well; these were restricted at first in amount and frequency. A small greenish stool was passed eight hours after the operation, and faecal matter began to appear in the stools in twelve hours.

The temperature, which was raised on admission, dropped to normal in a few days, and the wound healed by first intention. It was fortunate that the caecum and appendix could be pulled into a wound to the left of the umbilicus.

The combination of measles, appendicectomy, and a successful operation for intussusception of such a long portion of the bowel, in a child of 7 months, makes the case perhaps worthy of record. I have seen the boy a short time ago, and he has been in perfect health since his operation.

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THE SARCOPTIC MANGE OF THE DOG IN MAN.

The lecture recently given by Professor Hobday before the combined meeting of the Royal Society of Medicine and the Central Veterinary Medical Society on the contagiousness of certain diseases of animals to man, recalls to my mind an instance five years ago when a pug dog, the subject of sarcoptic mange, transmitted the disease to a family of six people.

The little animal was a great pet, and became very badly infected before any treatment was adopted, the extent and nature of the disease not being realized. The dog used to lie against the people's legs in front of the fire, often for half an hour or more at a time, pressing himself against them, and each developed the infection, which was in the form of an extremely irritable rash, not unlike lichen planus in appearance. It lasted for about six or eight weeks, and did not disappear until after the skin disease on the dog had been taken in hand, treated and cured.

I am pleased to see that attention has been drawn in a medical gathering to the subject of the contagiousness of certain animal diseases to man, as I am quite sure that its importance ought to be more fully realized and lectured upon in the curriculum of the student.

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Reports of Societies.

PUERPERAL SALPINGO-PERITONITIS.

At a meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine, on March 3rd, with the President, Professor HENRY BRIGGS, in the chair, Dr. ALECK W. BOURNE read a paper on "Acute puerperal salpingo-peritonitis." He justified his modification of the name of a common disease as it emphasized the fact that the condition was entirely different from acute non-puerperal salpingitis in morbid anatomy, physical signs, and treatment. The morbid anatomy was largely determined by the anatomical position of the involuting tube and uterus at the time when the inflammation occurred; suppuration thus tended to be primarily extra-pelvic and abdominal, causing abscesses above the brim of the pelvis. Further points were the early obliteration by adhesions of the pouch of Douglas, secondary ovarian infection, secondary cellulitis of the upper portion of the broad ligament, and the arrest of uterine involution so long as infection was unrelieved. The cause of puerperal salpingitis was, he stated, an organism (streptococcus in three of the tubes examined) which either ascended from the uterus, probably the commonest mode of infection, or which had existed dormant in the tube from pregnancy, as proved by a case of salpingitis following Caesarean hysterectomy where the tubes were absolutely normal, or which provoked an exacerbation of a pre-existing salpingitis during the puerperium. The symptoms were those usually found in acute peritonitis of the lower abdomen, and were not particularly noteworthy. The chief points were that the temperature and pulse tended to be high, more so, for instance, than in acute appendicitis; the lochia was usually unaltered; and retention of urine or painful micturition might denote an extensive secondary cellulitis. The physical signs required careful examination. On examination of the abdomen the initial tenderness was at a point just below and external to the umbilicus; the fundus uteri was at first median and rose about two inches above the