Canvas clothing is supplied for the use of the men carrying out these duties, and extra duty pay at 8d. per diem is usually given them.

It may be of interest to add that the strata in the camp referred to where urine pits were dug was as follows:—

12 inches soil.
9 " dark sand.
9 " light sand.

Remainder consisted of chalk with an occasional mixture of flints.

NOTES ON ORGANISMS ISOLATED FROM THE BLOOD OF CASES SUFFERING FROM SYMPTOMS SIMULATING MILD ENTERIC FEVER OR PARATYPHOID FEVER.

By Major C. F. Wanhill.
Royal Army Medical Corps.

During three years' laboratory work in Mhow a very large number of blood cultures have been examined, since blood has to be taken in all cases, not malarial, which have continued pyrexia. In many cases Bacillus typhosus or B. paratyphosus A have been isolated, in some several organisms grew on the plates which were obviously contaminations, but in some pure cultures of organisms which had not previously been associated with disease-producing organisms were recovered.

Among workers in the Tropics there has been a conviction for years that besides the recognized disease-producing organisms there are organisms which, given favourable circumstances, can get access to the blood and cause a septicæmia with symptoms similar to mild enteric fever. These diseases have been placed in the "pyrexia of uncertain origin" class and it is to this class of disease that most attention has been paid of late years. A discussion as to the number of diseases which have been identified and the causative agent discovered enabling the disease to be removed from the pyrexia of uncertain origin class is not indicated here, but the class is becoming smaller and smaller yearly owing to improved methods of diagnosis and to bacteriological research. There are, however, a very large number of cases which can be attributed to no definite disease, and it may be, as the following results of blood examinations seem to show, that organisms, ordinarily non-pathogenic, can under favourable circumstances become pathogenic.

Only the cases in which organisms were recovered in pure culture from the blood are given, and it is thought that such organisms may be reasonably supposed to have actually come from the blood and not to be contaminations, as these would probably show several organisms and not one only. It is, of course, impossible to prove the organism by injecting into another person, as a volunteer would be hard to find and the Government would not allow such experiments. The results are therefore regarded as indefinite and can only be proved by weight of
Organisms isolated from the Blood of Persons suffering from "Pyrexia" simulating Enteric Fever or Paratyphoid Fever.

<table>
<thead>
<tr>
<th>No.</th>
<th>Glucose</th>
<th>Lactose</th>
<th>Mannite</th>
<th>Casein</th>
<th>Dulcitol</th>
<th>Peptone Water</th>
<th>Litmus Milk</th>
<th>Inulin</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Acid and clot</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Acid no clot</td>
<td>Indol</td>
</tr>
<tr>
<td>5</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Acid and clot</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>As above</td>
<td></td>
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<tr>
<td>7</td>
<td>+</td>
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<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
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</tr>
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<td>8</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Large bipolar staining bacillus</td>
<td>Non-motile; Gram-negative; no agglutination; pure culture</td>
</tr>
<tr>
<td>10</td>
<td>Acid</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Acid and clot</td>
<td>Acid</td>
</tr>
<tr>
<td>11</td>
<td>&quot;</td>
<td>Acid</td>
<td>Acid</td>
<td>Acid</td>
<td>-</td>
<td>-</td>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>12</td>
<td>&quot;</td>
<td>Acid</td>
<td>-</td>
<td>-</td>
<td>Clot bleached</td>
<td>-</td>
<td>-</td>
<td>Acid</td>
</tr>
<tr>
<td>13</td>
<td>&quot;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Large opaque colonies; small, very motile bacilli; Gram-negative; no agglutination; pure culture</td>
<td>-</td>
<td>Green colour</td>
<td>Large opaque colonies; very motile bacilli; Gram-negative; non-agglutinating; pure culture</td>
</tr>
<tr>
<td>14</td>
<td>Acid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Acid</td>
<td>Firm, opaque colonies, not emulsifying; Gram-negative; agglutination negative; motile</td>
</tr>
<tr>
<td>15</td>
<td>Acid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Alkaline</td>
<td>-</td>
<td>Acid</td>
<td>Small bacilli + motility; non-Gram-staining or agglutinating; pure culture</td>
</tr>
<tr>
<td>16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Five cases.</td>
</tr>
</tbody>
</table>

Characteristics

- Motile; Gram-negative; agglutinations; *B. typhosus* and *B. paratyphosus* A negative; pure culture
- Motile; Gram-negative; agglutinations negative; pure culture
- As above
- Small bacillus, very motile; Gram-negative; agglutinations; *B. typhosus* 1 : 100, *B. paratyphosus* A 1 : 200; pure culture
- Very small, non-motile bacillus; Gram-negative; non-agglutinating; pure culture
- Opaque colonies, non-motile; Gram-negative; no agglutination; pure culture
- Large bipolar staining bacillus, non-motile; non-Gram-staining; pure culture
- Small motile bacillus; non-Gram-staining; pure culture
- Small, very motile bacillus; Gram-negative; no agglutination; pure culture
- Large opaque colonies; small, very motile bacilli; Gram-negative; no agglutination; pure culture
- Firm, opaque colonies, not emulsifying; Gram-negative; agglutination negative; motile
- Small bacilli + motility; non-Gram-staining or agglutinating; pure culture

Name and Date.

- Pte. G—.
- Dvr. S—, 22.11.12.
- Five cases.
The Jamaica Tarpon

evidence. The organisms vary also greatly in their reactions, are all non-pathogenic to guinea-pigs, and do not admit of any classification. In some cases it will be noticed that two cases, from which the same organism was isolated, were admitted to hospital from the same unit about the same time, indicating a common infection, and in one case, Driver S——, the particular organism (No. 9) was noticed first in a film made for malarial examination, and when a blood culture was made was also recovered from it. This seems an important piece of evidence, though of course not conclusive. The same organism was recovered from Bombardier R——'s blood, from the spleen of Corporal R——, who died of symptoms of food poisoning, and from the stools of Mrs. H——, who died with choleraic symptoms, all about the same time. This certainly seems to point to this being the causative organism.

The publication of these results may have the effect of bringing out the experiences of other bacteriologists in this line, and in this way some definite results may be obtained.

Sport.

THE JAMAICA TARPON.

By Colonel B. Wilson.

There are several ways of catching the tarpon of Jamaica, but they more often result in losing him after you have had a taste of his quality.

Perhaps this is one reason why tarpon fishing is such fascinating sport, and why the best and keenest sportsman that I know has never caught a tarpon at all, but kept his enthusiasm alight on the fights and runs and hair-breadth escapes by which he has lost them.

The tarpon is a western fish. Megalops thrysoides is, I believe, his name in the language of science, and his place is at the head of the herring tribe. The Gulf of Florida is where he mostly lives. There he is pursued with nickel-railed, plush-cushioned electric launches, Tarpon Club buttons, and automatic one-hundred-dollar reels, which play the fish themselves, and report progress on a gramophone. These devices give an exclusively American flavour to the sport, and ensure that no one can “come in” who is not prepared to put up a pile of dollars.

On the whole, I think, up to the present, we do the thing better in Jamaica. There is, however, in Jamaica, rather a tendency towards American methods. There are hotels run on American principles by American managers, with American manners, tourists'