four hours, take several days to return to normal, and we should not expect the adenosine triphosphate content to reach the normal level before the contractile element of the muscle fibres has been restored (Szent-Györgyi)[5].

These experiments throw no direct light on the role of adenosine triphosphate in ischæmic shock, but they do show that it cannot be ruled out as a possible factor.

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Amœbiasis in Durban

IN Durban there is a reversal of the customary incidence of amœbiasis. It is generally stated that an indigenous population is less susceptible to this disease, but in Durban the native African is much more liable than the European or Indian to acute, fulminating amœbic dysentery. In Europeans the condition is usually chronic, with an accent on the vague manifestations. When there is dysentery in Europeans it is usually of the 'walking' type, whereas in Africans the patient is prostrate. Examination of the stool in African cases shows the cytology of an acute bacillary dysentery, without macrophages, but with myriads of large, actively motile, hæmatophagous trophozoites of *E. histolytica*. In fact, as many as 150 parasites have been counted in a single high-power field. The amœbæ are so motile that they are streaked out often with a tail of dragging detritus. The customary distinction between ecto- and endoplasm is not clearly seen in fresh preparations, for the granular material moves into a pseudopod almost as quickly as this is formed, and it is only in older specimens that clear ectoplasm is obvious.

Amœbiasis in Africans has a high morbidity and mortality, for in 1944 there were 1,203 proved cases at King Edward VIII Hospital, with 198 deaths.

Opinions differ as to the reason for this 'racial' susceptibility. The African has been incriminated as the source of amœbiasis here, but rather is it the reverse, for the African is probably meeting a new disease, judging by the severity of the infection.

This manifestation of amœbiasis is probably due to a number of factors: (1) Contact between a susceptible race and a race with a high host-parasite equilibrium. (2) The nature of the African diet, particularly in urban areas and under war-time conditions. This diet is almost exclusively carbohydrate, which is definitely conducive to infection. It may be that there is a sub-clinical intestinal pellagra rendering the bowel wall particularly susceptible to invasion. (3) In rapid passage from individual to individual the amœba gains virulence. (4) The insanitary conditions in which the detribalized native lives around the towns offering employment. The parasite may in part be water-borne, for there is always an exacerbation when the local streams begin to run after the rains. Possible vectors such as flies and cockroaches are numerous, and there can be no doubt that direct transmission takes place. Vegetables as a medium are not important; for the African under town conditions gets little of these.

Further work is being done on this problem, and will be reported in due course.

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An Illusion of Size

I READ Dr. Loewenstein's letter[1] with the above title with great interest and began by repeating the tests which he describes. I took a bright nickel threepenny piece (1944) and polished it; I took also a very dull one which was minted during 1937. I placed them on a black background and at once saw, as Dr. Loewenstein states, that the older one appeared the larger.

Being somewhat puzzled by this observation, I measured the two coins and this is what I found: diameter angle to angle, old coin 3·075 mm., new coin 3·060 mm.; diameter, flat to flat, old coin 3·01 mm., new coin 3·00 mm.; surface, inside raised edges, old coin 2·72 mm., new coin 2·66 mm. Thus in each case the older coin is the larger. These measurements were made with ordinary engineer's gauges. The accuracy was, however, sufficient to establish the fact that the old coin is in certain respects physically larger than the new one. An examination of coins minted in the year 1938, 1939, 1941, 1942 and 1943 indicated that the change in size occurred in between 1939 and 1941. I tried to obtain a coin for 1940 but without success.

Two 1937 coins of the same size were now selected, a dull one and a polished one, and these were placed as before on a black background. With perpendicular lighting the dull one appeared to be either the same size or slightly smaller than the bright one, presumably due to retinal irradiation produced by the latter. With oblique lighting, on the contrary, the dull one sometimes appeared to be slightly larger than the bright one. This seemed to be due to the bright reflexion from the raised edge of the polished coin being somewhat smaller (since the light was reflected from the outside of the raised edge on one side of the coin and from the inside of the raised edge on its other side) than the matt reflexion from the raised edges of the unpolished one. Very careful adjustment of the oblique lighting had to be employed in order to obtain this effect, for otherwise the coins appeared the same size, or the dull one the smaller as with perpendicular lighting.

So far as I can see from these experiments, it is unlikely that the effect described by Dr. Loewenstein is a psychological one. It is either due to an actual difference in size of the two coins or to the way that light is reflected from them. It would be interesting to know if in his experiments Dr. Loewenstein measured the coins to see whether or not they were identical in size.

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