recommended 50–75 mg./kg. The variation in the domestic tablespoon was investigated by measuring the capacity of nine spoons drawn from different households. Each spoon was filled level with water and also to its maximum with the heavy piperazine syrup. While the variation in capacity of tablespoons is notorious, the findings listed below are of interest:

Spoon No.	Filling Level with Water	Overfilling to Maximum with Piperazine Hydrate Syrup
1	5 drachms	8 drachms
2	6 ,,	8 ,, 40 min.
3	4 ,, 20 min.	6 ,, 10 ,,
4	6 ,,	9 ,, 20 ,,
5	6 ,,	9 ,, 50 ,,
6	5 ,, 40 ,,	9 ,, 20 ,,
7	6 ,, 40 ,,	9 ,, 25 ,,
8	6 ,, 10 ,,	8 ,, 40 ,,
9	5 ,, 20 ,,	8 ,, 10 ,,

Note: 1 drachm = 3·5 ml. 60 minims = 1 drachm.

These can be summarized as follows: Of the nine tablespoons filled level with water one held ½ fl. oz. (14.2 ml.), two held 25% excess, and six held 50% excess. Of the nine tablespoons filled to the maximum with piperazine hydrate syrup, eight held 100% excess or more, and one held 50% excess. To take the worst example, it will be observed that in spoon No. 5 the dose of syrup may reach nearly two and a half times the intended 4 drachms.

It is recommended that, in the use of this drug, account must be taken of variation in weight of the patient, and that for the treatment of adults the prescribed quantity should be measured in a graduated medicine glass.—We are, etc.,

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O. D. STANDEN.

London, N.W.1.

Sweating in Shock

SIR,—In the *Journal* of October 10 (p. 832) Dr. Ronald Woolmer suggested that some other explanation than sympathetic overactivity was needed for sweating during shock or surgical operations. Experiments carried out by Dr. T. S. Lee and myself[1] have suggested that sweating accompanies extensive central nervous activity of various kinds and that the sweat glands of the axillae, palms, and soles sweat most readily in response to such central nervous causes. Mild sympathetic excitation *per se* does not give rise to sweating.

Although it is undesirable to seek teleological explanations for all phenomena, Dr. Woolmer's request for such an explanation can be met in this case. Extensive central nervous activity in primitive man is most likely to have resulted from fear, anger, hunger, love, or injury, and in all these circumstances recognition of friend or foe is important. Since sweating in the axillae has the strongest smell and since sweating of the soles, and to some extent also of the hands, will leave the most scent in the tracks, it seems teleologically sound that those regions should sweat the most readily in response to central nervous stimuli. Sweating of the hands may also help grasping.—I am, etc.,

E. M. GLASER.

Singapore.

REFERENCE

1 *J. Physiol. (Lond.)*, 1953, **122**, 59.

Single-sample Test in Differential Diagnosis of Jaundice

SIR,—The evidence presented by Dr. Ian Wang (*Journal*, October 31, p. 971) for the inclusion of cholesterol determination in single-sample liver-function tests is undoubtedly convincing, but is liable to be received unfavourably by our already overburdened laboratories. However, there is a simple substitute in the form of the lipid turbidity test described by Kunkel *et al.*[1] which, although indicating changes in the total lipids (which is very often influenced by the phospholipid fraction), appears to parallel very closely the cholesterol content of serum.

The reagent and technique are extremely simple and require a minimum of working time: 1% liquid phenol in 12% NaCl in distilled water is kept in the refrigerator and 0.2 ml. of serum is mixed with 6 ml. of this phenol/saline solution. After standing for 30 minutes, the mixture is shaken and read as in the case of thymol turbidity. The units are calculated by assigning an arbitrary value of 15 units to a suspension of $BaSO_4$ (3 ml. of 1.15 g. $BaCl_2 2H_2O$ in 100 ml. water made up to 100 ml. with 0.2N H_2SO_4), which is read as a standard. My own range of normal variation is about 2 to 10 units, but it is a wise procedure for each laboratory to determine its own normal limits. I have used this test for a number of years, and, in addition to Dr. Wang's interpretations, have found it of value in distinguishing between acute and chronic hepatitis, since the former gives high normal or even elevated values, while the onset of cirrhosis is usually accompanied by low values. Indeed, a value below 2 units is of grave prognostic import. High values are found in fatty liver due to alcoholism when often the only abnormality is a raised lipid, while in biliary cirrhosis associated with xanthomatosis very high figures are encountered.

A valuable feature of this lipid test is that it enables one to eliminate false positive thymol turbidities which sometimes (though not always) occur in the presence of a raised lipid. In a recent paper dealing with liver function tests in myeloma, Dr. L. L. Griffiths[2] found difficulty in correlating some of his positive thymol turbidities with results obtained by other workers in this field. I feel these anomalous positive results are false reactions due to excessive lipid, particularly as Dr. Griffiths's excellent electrophoresis figures show an increase in β globulin in the sera in question and it is now fairly well established that lipid forms a complex with β globulin.

Before using the lipid test, I used to check the thymol turbidity by putting up 0.3 ml. of serum in 7.5 ml. 15% alcohol, which Mawson and I[3] found to give almost identical turbidities to those obtained in the thymol test. However, I still carry out this alcohol turbidity test in order to have, together with the lipid reaction, a double check on the thymol reading.—I am, etc.,

E. B. LOVE.

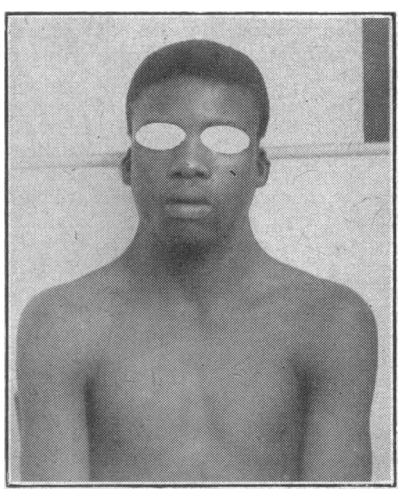
Preston.

REFERENCES

1 *Gastroenterology*, 1948, **11**, 499.
2 *J. clin. Path.*, 1953, **6**, 189.
3 *Lancet*, 1948, **2**, 850.

Turner's Syndrome in the Male

SIR,—The accompanying photograph was taken within three weeks of my reading the article by Drs. R. Sougin-Mibashan and W. P. U. Jackson on Turner's syndrome in the male (*Journal*, August 15, p. 371). The subject is a Zulu youth who had but recently arrived in Durban to seek work. By statutory regulation all such persons have to undergo a medical examination before they can be employed, and as a medical officer to the Native Administration Department about 120,000 go through my hands each year. This is the first case remotely resembling the Turner syndrome that I have seen during the past seven years.



Age 19 years, height 5 ft. 1 in., well built and muscular with a masculine voice, masculine distribution of body hair, a larger than average penis, but testicles small and firm. In addition to the webbing of the neck, the photograph distinctly shows congenital malformation in both ears. Mentally he was bright and gave a good account of himself. He disavowed interest in sex, and never had an erection.

He promised to return for further investigation, but this now seems unlikely. I gather from my staff that he looked upon my activities toward himself as a form of witchcraft, and it was obvious that he was anxious to be off.—I am, etc.,

D. F. MACKENZIE.

Durban.