I quote from a rare copy of *Practical Observations on the Inoculation of Cowpox* by James Bryce, "one of the surgeons to the Institutions for the Gratuitous Inoculation of Cowpox, Edinburgh, 1801."

"Some have asserted that the cowpox is not generated in the constitution of the cow, but produced on her by inoculation with certain diseased fluids of the horse; while others are of opinion that this ailment is truly vaccine, being generated solely in the constitution of the cow. . . .

"The horse, it is well known, is subject to an inflammation and swelling in the heels, which is called the grease, from which, at a certain period of the affection, there issues a very acrid thin matter; and this applied to the udder or teats of the cows . . . gives rise to a postular [*sic*] affection on those parts, which is the cowpox."

For all I know, Jenner himself may have proved this theory to be a scientific truth.—I am, etc.,

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Percentages

SIR,—A minor annoyance in the reading of tabulated data is the habit of some authors of reporting the percentage of both positive and negative, leading the reader to check whether the figures do indeed add up to 100. This might be "planned redundancy," a common computer method of confirmation of a result or a method of emphasizing the figure.

But when a pair of figures put out by a computer do not add up to 100, as recently in the *B.M.J.* (2 September, p. 613), one wonders who or what has slipped.—I am, etc.,

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*** We apologize for the error in Table I in the article referred to.—ED., *B.M.J.*

Measurement of Blood Loss

SIR,—We were very interested in the paper by Dr. J. M. Holt and others (14 October, p. 86) regarding the measurement of blood loss using a whole body counter. Although this method is very convenient for the patient and the doctor, the considerable discrepancy between calculated blood loss and actual blood loss shown by the authors is alarming, and may limit the clinical usefulness of whole body counters in studying blood loss.

We have found that the method of detection of blood loss using radio-chromium-labelled red cells and faecal collections is a highly accurate way of detecting intestinal blood loss over a period of weeks. The method is sufficient to detect less than 0.5 ml. of blood and is equally applicable to menstrual blood loss.

The simplicity of this technique of faecal collection may well recommend itself for more routine clinical use, and in appropriate patients can be used as an outpatient procedure. The whole body counter is the ideal tool for iron absorption studies, but in view of the serious disadvantage in accurate detection of blood loss from our own experience we would recommend faecal collection whenever possible using radio-chromium.—We are, etc.,

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Thiothixene in Schizophrenia

SIR,—Thiothixene (Navane, Pfizer) is a new addition to the group of tricyclic major tranquillizing and antipsychotic drugs. A number of controlled trials[1 2] in other countries on acute and chronic schizophrenic patients have indicated a beneficial effect, principally on excitement and suspiciousness, and, in apathetic chronic schizophrenics, an activating effect. Dosages employed range from 5 to 60 mg. daily, with a mean of 30 mg. daily. Comparative studies have demonstrated a therapeutic range equivalent to thioridazine and trifluoperazine. The only consistent side-effects appear to be extrapyramidal, which respond to anti-Parkinson drugs.

We should like to report briefly an uncontrolled pilot study in 16 chronic schizophrenic patients consisting of nine females aged from 36 to 73 years, mean 55 years, and seven males aged from 25 to 48 years, mean 35 years. The duration of illness ranged from 3 to 40 years with a mean of 16 years. The psychosis took a paranoid form in six patients and a hebephrenic form in 10.

Thiothixene was given by mouth in an initial dose of 5 mg. daily, increasing gradually to a maximum of 40 mg. daily for a total period of 12 weeks. A number of target symptoms and the overall response were rated weekly and the occurrence of side-effects was noted. Weekly blood counts, liver-function tests, blood urea, and urinalysis were performed.

Overall improvement was observed in eight patients. In two patients, with duration of illness of 22 and 7 years, the response was quite dramatic, the former being able to return home and the latter being allowed into the hospital grounds without supervision for the first time. The target symptoms which showed the greatest response were excitement (six patients), suspicion (seven patients), depression (four patients), anxiety (six patients), and social inadequacy (eight patients). Extrapyramidal side-effects were observed in 11 cases, but in only two were they severe enough to warrant the use of anti-Parkinson drugs. Four patients were withdrawn from the trial before the end of the 12-week period; two because of poor clinical response, one because of uncontrolled extrapyramidal effects, and one because of a raised serum glutamic pyruvate transaminase (110 S.F. units/ml.) after three weeks.

Much of the response could be a placebo effect, but in view of the failure of these patients to respond to previous drug therapy, and the dramatic response in two patients, we think it is worth proceeding to a properly controlled trial.—We are, etc.,

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REFERENCES

1 Gallant, D. M., Bishop, M. P., Timmons, E., and Gould, A. R., *J. Curr. Ther. Res.*, 1966, 8, 153.
2 Bishop, M. P., Fulmer, T. E., and Gallant, D. M., ibid., 1966, 8, 509.

Therapeutic Effects of a Thunderstorm

SIR,—In Zurich, in 1732, a report was published on an unusually violent thunderstorm which had arisen in the night between 30 June and 1 July of the previous year. The report was the work of Johann Jakob Scheuchzer (1672–1733), the Swiss scientist known in the history of palaeontology as discoverer of the fossilized remains of a giant salamander. Early in the century he published accounts of his travels in the Alps, with detailed notes on the life and occupations of the people (including an illustrated description of the process of cheese-making), on flora and fauna, the movements of glaciers, and barometrical determination of altitude. Scheuchzer has been called the founder of the physical geography of the Alps. By profession a medical practitioner, he became physician in ordinary to his native city Zurich.

After a description of the storm and some theological observations characteristic of the period, Scheuchzer's report makes the following comment*:

"And how, if I were to assert that the very Thunder-storm must serve to sustain and promote our Health, inasmuch as in such mighty Perturbances not only the Mountains, Valleys, Forests, and Rocks, but also our Bodies do quake, and that the Circulation of the Blood and of all the radical Moistures is promoted and that all the Discharges are more readily effected. Moreover, the Terrour itself which seizeth Men may make some Contribution, for that by its Agency the Influence of the sensitive Faculties upon the Upper Skin gains ascendency and the littlemost Vessels are comprest. To the which Cause I ascribe that various Persons of both Sexes, upon Inducement of this violent Storm, were some Days thereafter taken with a profuse Bleeding at Nose, as Instance a Widow of seventy Years, and *plethorick*, to whom I was summoned in the Night betwixt the third and fourth of July, and the same was freed by violent Bleeding at Nose from Giddiness and Head-akes, from the which she had suffer'd some Weeks before the Storm, and likewise eas'd of a Pursiness [or *Asthma*]."

Among conditions to which response may be expected Scheuchzer mentions pleurisy, running sores, rashes, "sickness of the limbs" (the term appears to have included "joynt-gout," "the palsy," in general "sickness wherein there is resolution of the sinews and limbs"),† and all kinds of fever.

Beyond such details as are given in the quotation no attempt appears to be made to postulate the mechanism of the process by which the alleged cure is brought about. It may or may not be relevant to point out that Scheuchzer died some four years before the birth of Galvani and 12 years before the birth of Volta. Whether the question of electric discharge comes into the picture or not, it would perhaps seem that the Swiss physician had some inkling of the nature of shock-therapy.—I am, etc.,

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* There appears to be a Latin version of the report, which I have as yet been unable to consult. The present excerpt is my own translation from the German into English as nearly equivalent as possible to the vocabulary and style of Scheuchzer.

† See Christian Ludwig, *Teutsch-Englisches Lexicon*, 3rd ed., Leipzig, 1765.