

host. There are no hair follicles in the sinus wall, and the lesion arises as a result of penetration of the epidermis by short sharp hairs from the heads of males, the setting up of a foreign-body reaction to them, and secondary infection. It is therefore again preferable to name such lesions "interdigital sinuses of barbers' hands," rather than use the confusing term "pilonidal sinuses."—We are, etc.,

A. R. CURRIE.
THOMAS GIBSON.
ARCHD. L. GOODALL.

Glasgow.

REFERENCES

- ¹ *Boston med. surg. J.*, 1880, 103, 485.
- ² *Lancet*, 1946, 2, 484.
- ³ *Ibid.*, 1948, 2, 13.

SIR,—Neither history nor histology supports Mr. R. G. MacLeod (*Journal*, March 28, p. 710) in applying the term pilonidal sinus to a suppurating and discharging dermoid cyst. The term pilonidal sinus was coined by R. M. Hodges¹ in 1880, and he described the condition in the following words: "On exposing its interior by an incision, a certain quantity of pus is evacuated, and a lock of loose hair is found occupying the space, more or less matted and curled, and of varying size and amount. The hairs of which it is made up are always short, without bulbs, and correspond in colour to those of the patient. The cavity containing them has no cyst or lining membrane, or other characteristic suggestive of a congenital dermoid wen; merely the granulating walls of an ordinary suppurating sinus, with no trace or suspicion of hairs growing from its surface, or of isolated spots of cuticle from which they might have been shed."

It is remarkable that in the face of such evidence as this the developmental or endogenous theory of a pilonidal sinus should have become widespread. The champions of this theory have been hard put to it to explain the conspicuous absence of an epithelial lining from the main cavity of a pilonidal sinus and have had to fall back on the argument that the epithelium is destroyed by the suppurating. Mr. MacLeod's interesting case has spiked this gun by showing that when there really is an epithelial lining it can withstand repeated suppurating for as long as two years. It is time the endogenists surrendered.—I am, etc.,

Enfield, Middlesex.

B. H. PAGE.

REFERENCE

- ¹ Hodges, R. M. (1880). *Boston med. surg. J.*, 103, 485.

Myxomatosis in Control of Rabbits

SIR,—I was interested to see in the *Journal* (March 21, p. 639) the brief note about the satisfactory effects of myxomatosis in the destruction of rabbits in Australia. I think there should have been included some reference to Dr. H. de B. Aragão, of the Instituto Oswaldo Cruz in Rio de Janeiro, who first suggested its use for rabbit control in 1928. His work and the parts played by American and British workers are briefly summarized in an article by Liversidge in *Discovery*.¹—I am, etc.,

London, N.W.1.

C. J. HACKETT.

REFERENCE

- ¹ *Discovery*, 1952, 13, 191.

Cancer and Organic Content of Soil

SIR,—Dr. E. H. Eason (October 25, 1952, p. 941) considered it misleading to mention organic manure in relation to plant copper deficiency. I can find no substantiation for this, since it appears from the literature that the factor involved is simply the power of organic matter to fix copper in a form unavailable to plants. The other soil conditions mentioned by Dr. Eason are not relevant here, important though they are in agriculture. On the other hand, Dr. E. D. Allen-Price (October 11, 1952, p. 831) finds excessive gastric cancer mortality in an area of intensive cultivation in his region.

I have therefore examined data¹ for one area where exceptionally heavy organic manuring has long been practised—the Biggleswade and Sandy area of Bedfordshire. It has been observed that this area "seemed conspicuous for

the malignancy of cancers of all sorts."² Total cancer mortality, standardized for the experience of all Bedfordshire (age, sex, type of district), is given below.

District	Expected	Actual	Ratio %
Biggleswade R.D.	175	199	113
" U.D.	64	63	99
Sandy U.D.	31	43	139
Aggregate	270	305	113

Soil samples from cultivated land in the area gave an ignition-loss figure of 8.2%; from heaths and woods, 6.0%. From this it would seem that heavy organic manuring does induce the "total cancer factor," despite rapid humus turnover. From other evidence too lengthy to give here I suspect that a protective factor exists in normal vegetables, which is depressed by copper deficiency. It may be a product of tyrosine oxidation, though this is problematic. If this deduction is correct, then a simple agricultural operation can increase human resistance to carcinogenesis. Indeed, in areas where micronutrient fertilization is essential for adequate crops, farmers may now be preventing cancer. How true to historical form!

So long as the malignant mutation remains irreversible, active prevention is the best hope.—I am, etc.,

London, S.W.17.

C. D. LEGON.

REFERENCES

- ¹ Harvey, C. A. (1953). Personal communication.
- ² Gordon-Taylor, G. (1939). *The Practitioner*, 143, 21.

Agriculture (Poisonous Substances) Regulations

SIR,—I would refer to your annotation in the *Journal* of March 28 (p. 717) on Agriculture (Poisonous Substances) Regulations, S.I. 1953, No. 358. The last paragraph of the annotation contained the following comment. "They [the regulations] are open to criticism for the reliance they place on the wearing of face-shields rather than full face respirators. The main route of absorption is through the lungs, and face-shields do not prevent absorption by this route during spraying operations. They are likely to be particularly ineffectual when organo-phosphorus compounds are used in an enclosed space such as a greenhouse."

This criticism is hardly justified, and suggests misinterpretation of the regulations. The regulations rightly distinguish between the dangers from the specified substances when they are suspended in the atmosphere in an enclosed space and likely to be absorbed in the lungs, and when in the form of coarser droplets which are rapidly deposited. In the former case the use of a full-face respirator is specified in the regulations (see First Schedule, Part II, item 7, and Regulations 4 (2)), in the latter a face-shield only is required.—I am, etc.,

W. A. WILLIAMS,
Secretary.

London, W.1.

Association of British Insecticide Manufacturers.

Attempted Suicide by Burning

SIR,—Mr. R. J. V. Battle and Dr. H. E. S. Marshall's case record of an attempted suicide by burning (*Journal*, December 27, 1952, p. 1397) recalls a patient who is at present undergoing treatment for a like condition.

Two years ago a 15-year-old girl poured paraffin over her clothes and set them alight. She suffered severe burns of the right side of face, neck, front and back of chest, axillae, right forearm, and hand. On healing, severe contractures were formed on the neck and axillae. She is one of eight daughters; and, according to a local attitude to which her family adheres, this is considered a misfortune. She was denied any parental affection, and besides the scolding by her father she was often beaten. She has had limited schooling. Following the healing of the burns, she has attended a psychiatric centre in Jerusalem, but at all times, according to their records, she maintained a reticence about her deeds.

While under plastic surgical treatment, which is of necessity a lengthy one, she is proving very co-operative. The abdominal flap is already in position on the neck, and the favourable result