As Lewin and Wassén² described joint redness and heat accompanying clinical improvement with D.C.A. and ascorbic acid, skin thermometry was performed on a series of cases,¹ with entirely negative results. This is certainly an objective measurement. Kellgren and Janus, at the Heberden Society meeting, 1950, showed a method of measuring joint blood flow, and this is also completely objective.

I am making no attempt to discuss the pathological findings, such as eosinophil counts, which are valuable in such investigations. No criticism is offered of the experimental method used,

nor of the actual results obtained.—I am, etc., London, W.C.1.

REFERENCES

R. HARRIS.

¹ Hartfall, S. J., and Harris, R., *Lancet*, 1949, **2**, 1202. ² Lewin, E., and Wassén, E., ibid., **2**, 993.

Osteoarthritis and Occupation

SIR,—I would like to support Dr. C. W. Buckley's contention (September 23, p. 728) that trauma, especially minor trauma, is an important cause of osteoarthritis. An analysis of the relative occupational incidence, and its effects on knee- and hip-joints in clinics which I attend, tends to confirm this view. In the Sunderland clinic we have a large proportion of miners who work in fairly low coal seams, mostly on their knees or "hunkers," while at the Darlington clinic a considerable number of agricultural workers attend who, as one farmer put it, are "clod-hopping all day." Among the miners osteoarthritis of the knee as against the same condition in the hip occurred in the proportion of twelve to one, while among the agricultural workers the ratio was reversed and there were 14 hip-joint cases as against one knee case. Other trades showed the following figures:

		Cases	Cases
Pneumatic tool workers (other than	miners)	6	4
Policemen, postmen, gamekeepers		7	3
Tram, bus, and lorry drivers		2	8

This investigation was made in 209 cases. I believe a much wider survey would be of considerable use, especially if shoulder- and elbow-joint cases were included. Most orthopaedic surgeons are impressed by a steady increase of arthritis of these joints following the widespread use of pneumatic tool machinery.—I am, etc.,

Sunderland.

W. GRANT WAUGH.

SIR,—It seems to me that Dr. C. W. Buckley (September 23, p. 728) and Mr. Franklyn Stonham (September 9, p. 629) are at cross purposes. In his paper Dr. Buckley states quite clearly that major trauma is less often a cause of osteoarthritis than microtrauma, which is often of occupational origin. This is perfectly true, but Dr. Buckley's natural habit of understatement has not, on this occasion, had the desired effect and has led Mr. Stonham into battle. The fact of the matter is, in my opinion, that there are two types of osteoarthritis, one of which might be called simply "osteoarthritis" and the other termed "traumatic osteoarthritis."

Simple osteoarthritis is, as Dr. Buckley says, a matter principally of age and stress. It is sometimes found initially in one joint, and is fully described in textbooks (Fletcher, 1947). It gradually spreads to involve other joints, or it may initially appear in several joints at the same time in the same way as it does in osteoarthritis of the spine, which, although it bears the same name, is not the same disease.

Traumatic or monarticular osteoarthritis is a different condition. It is uncommon, and in 500 cases of osteoarthritis was found only 60 times. So far as I know, it is confined to one joint for all time. I have a case of traumatic osteoarthritis of the left knee (due to a motor accident) which I first saw over nineteen years ago in 1931, and the condition is still confined to that one joint; the x-ray changes have gradually advanced over the years. Those unusual cases of traumatic osteoarthritis due to meniscectomy have this same characteristic, and may occur in patients of any age. The youngest case in my experience was operated on for a cartilage in 1943 and was then 23 years of age. I lost sight of the patient in 1946, but the condition was unaltered then, so far as clinical and radiological examination, could tell.

Mr. Stonham's view that muscle spasm should call for a revision of the diagnosis is not, to me, understandable and is probably brought about by the fact that prostigmin sometimes relieves the muscle spasm in rheumatoid arthritis.

I think it should be mentioned here that the causation of simple osteoarthritis, although unknown, is closely linked with the incidence of obesity and hypertension. Obesity occurs eight times as commonly and hypertension four times as commonly in connexion with osteoarthritis as in an average cross-section of the sick population. It seems that obesity can only really have an effect through increased stress and strain, which amount to the infliction of multiple microtraumata; hypertension is nearly always associated with arteriosclerosis, and the joints are affected in this way. I certainly agree with Mr. Stonham that patients are justified in objecting to wearing callipers and Marsh knee cages.—I am, etc.,

London, W.1.

ERNEST FLETCHER.

REFERENCE

Fletcher, Ernest (1947). Medical Disorders of the Locomotor System.

Medical Students in Prague

SIR,—As one of the participants in the second congress of the I.U.S. I feel that Mr. Diggory (Journal, September 30, p. 780) has been somewhat ungracious in his attitude to our Czech hosts. It is unjust to compare the Hitlerjugend with the Czech Youth, who suffered horribly under Nazi oppression for six years. These Czech youths extended to us, and to all other students regardless of nationality, creed, or race, a hospitality unrivalled in its warmth. Whatever may be the political inclinations of the student, it is always in the true spirit of British tolerance to listen and discuss with those who hold opposing views. From these discussions we all learned much, and made many friends among the students of 75 nations. For this reason alone the congress has been worth while.

Mr. Diggory has stressed the earnest desire of Czech students for peace. Would it not be a good thing that we British should show them that we are just as anxious in this pursuit, and may not this common desire for peace become a bond of friendship uniting us?—I am, etc.,

London, W.C.1.

A. HERDAN.

SIR,—As a participant at the I.U.S. Congress in August I was interested in the account of it by Mr. P. L. C. Diggory (*Journal*, September 30, p. 780). There are some factual inaccuracies in his article on which I wish to comment.

The health services in Czechoslovakia differ in several respects from those in this country, but not in the ways Mr. Diggory suggests. Thus the cost of the scheme is borne almost entirely by contributions, assessed in proportion to income from those within the scheme. It is unfortunate that Mr. Diggory did not quote his sources of information. The Czechoslovak National Insurance Act is available in an English translation (Orbis, Prague); it was submitted for consideration at the International Labour Organization (U.N.O.) conference at San Francisco (June, 1948), and the 1949 yearbook of I.L.O. compares the wider benefits of the scheme favourably with our own. Although self-employed persons are still excluded from the sickness insurance part of the scheme, and do not get entirely free treatment, their financial state does not influence the nature of treatment available.

It is hardly surprising that politics should enter into a discussion of the health service, especially if one considers the realms in which conspicuous progress can be readily observed in Czechoslovakia. What we in this country tend to regard as chronic problems in social medicine (notably tuberculosis) are being rapidly solved, new hospitals and health centres are being built, and group practices are encouraged. Compare this with Britain, where not one new sanatorium or health centre will be built in the coming year. I agree with most of Mr. Diggory's actual observations, none of which contradict this assertion, though I saw nothing to suggest that politics enters into medical treatment in the way he implied. I happened, uninvited, to visit two British students being treated as in-patients for a few days