

spondence, which we have had the opportunity of seeing, gives the geometrical considerations which indicate that this assumption is valid. We are not therefore including in our letter any considerations of the geometry of the problem.

We would at this point mention the other possible sources of error, common to any radiological method of measurement.

(a) Focal spot of tube.—Probably not exceeding 0.2 mm.

(b) Density of image on film.—Probably not exceeding 0.2 mm.

(c) Blurring due to movement.—Probably not exceeding 0.2 mm.

These three factors give lower degrees of definition of the image lines. Russel H. Morgan (*Amer. J. Roentgenol.*, 62, 870) points out that various combinations of these errors probably interact and that in practice the error is small.

(d) The measurement of the tube shift.

(e) The measurement of the tube-film distance.

(f) The subjective error of measurement of the measurer.—Say ± 0.2 mm. (A reliability test shows that this has a mean error probably not exceeding ± 0.2 mm.)

(g) The error of measurement of the callipers themselves.—Negligible if checked carefully.

2. Drs. Ward and Weber say that the image shift is "a few millimetres at the most," and "cannot be judged with any great accuracy." Using our film-tube distance and tube-shift, this shift is of the order of 1 cm. and can be measured with photogrammetric callipers to the order of ± 0.2 mm. This gives a possible error of 2% in this measurement.

3. The correspondents are unable to accept the results of a carefully planned experiment with a sectioned human cadaver. The previous notes should explain why in fact the results were so accurate.

4. Drs. Ward and Weber suggest that we should use telerradiography with our 15-mA apparatus at a distance of 6 ft. (1.8 m.) and an exposure of one second. As we pointed out, it is very difficult to keep an infant's limb still that long. The 100-mA machines that they recommend are now unobtainable second-hand, and we have not the necessary resources to obtain a machine capable of supplying 135 mA, which would enable us to cut our exposure time to one-eighth of a second.—We are, etc.,

FRANK FALKNER.

SYLVIA WISDOM.

London, W.C.1.

Butazolidin

SIR,—It is unfortunate that such exaggerated claims have been made for this new drug in the lay Press, and that certain of our medical colleagues have allowed enthusiasm to influence their judgment, particularly as such serious consequences may result from its improper use. It would be a great pity if this valuable drug fell into disrepute through unwise and uncritical employment at the present stage. Data collected by me over the last three years are not yet complete, but certain points have emerged and may briefly be summarized as follows: (1) Butazolidin produces more prolonged relief of pain than aspirin in a proportion (roughly 70%) of cases of rheumatoid arthritis. (2) It produces no greater relief of pain than aspirin in the more common rheumatic disorders such as osteoarthritis and intervertebral disk degeneration. (3) Butazolidin is as effective by mouth as by intramuscular injection. (4) No advantage is gained by increasing the individual dose above 0.4 g. in rheumatoid arthritis, nor in repeating it before the effect of the previous dose has begun to wear off. The duration of the effect varies from one to ten days in different individuals. The dosage should thus be 0.4 g. every one to ten days according to individual requirements, which can readily be determined. If butazolidin is given in this way the maximum benefit will be obtained and toxic effects are unlikely to arise. In my three years' experience I have only had one toxic reaction—a transient erythematous eruption. (5) Butazolidin should not be regarded as a substitute for standard methods of treating rheumatoid arthritis with gold and physiotherapy, but is a useful means of tiding the

patient over the early stages of such treatment. It is also of value in those patients whose sensitivity to gold prevents complete suppression of the rheumatoid process by this means.

Of the value of butazolidin in rheumatic fever, gout, and ankylosing spondylitis I am unable to speak.—I am, etc.,

Walkden, Manchester.

J. STEWART LAWRENCE.

Lung Cancer

SIR,—In their exhaustive paper on lung cancer (December 13, 1952, p. 1271), Dr. R. Doll and Professor A. Bradford Hill do not mention that *rara avis*—the man who 20 or more years ago smoked 2 oz. of tobacco or 50 cigarettes a week, and then stopped smoking. Cancer has a curious tendency to lie latent for years, especially in the case of the industrial cancers. Thus we find cancer due to soot (chimney-sweeps), oil (mule-spinners and shale oil workers), cobalt, and uranium (miners) developing years after men have ceased to work in the offending industry. I suspect that if cancer does follow smoking it will affect the type of individual I have mentioned.—I am, etc.,

Birmingham.

A. P. BERTWISTLE.

Medical Association of South Africa, East London Division

SIR,—We are anxious here in East London to contact any medical visitors to South Africa who may be passing through our port. The Union-Castle mail ships call here every Monday and Friday on their way from and to Britain, so that if we knew in advance of any prospective medical visitor, whether on business or pleasure, we could make contact and arrange for them to visit us. We sincerely hope that once our notable medical visitors know of a welcome awaiting them in East London, and of our keenness to hear their views and news, they will see their way to honour us with a visit and to give us a talk.—I am, etc.,

6, Barnes Court,
St. Michaels Road,
East London, S. Africa.

ELIZABETH M. I. McCABE,
Convener of Clinical Committee.

POINTS FROM LETTERS

The College of General Practitioners

Dr. T. R. THOMSON (Cricklade) writes: Of the societies and institutions which have sprung up in the last 50 years, surely this is the most ridiculous of all. You, Sir, should know as well as most, and more than many, that the *qualifications* of the best type of general practitioner have been, are, and always will be high character, intelligence, independence, and industry. Except for the one word "ability," I can find no interest in these in the *Memorandum and Articles of Association* of the College of General Practitioners. Shall the public be assured that the college boys (after payment of their ten guineas) will have these qualities? The good G.P. will see to it that he does keep up to date. Are the others to be goaded by the college and inflamed by the hope of the Dip.G.P.? A sorry world needs not more politicians and officials, but more poets and saints, not more scientists, but more thinkers and artists.

Early Contraceptive Sheaths

Dr. GEORGE V. BOYLE (Glasgow) writes: I am writing to protest against the inclusion of the article "Early Contraceptive Sheaths" (January 3, p. 40). In my opinion it offends against good taste, and some of the quotations are offensive in many ways as well as being vulgar.

"Et al., ettc."

Dr. W. W. ALLISON (Chesterfield) writes: Dr. A. J. Jex-Blake (December 6, p. 1259) is perfectly correct in his condemnation of "ettc.," which was obviously used facetiously. His advocacy, however, of "et al." is not so happy. "Et al." is clearly intended to represent "*et alii*." To give the term in full would only involve the substitution of two vowels for a consonant and a full stop. I do not think the printer would have reason to complain on the score of brevity or of increased labour. Finally, "*et al.*" though frequently used for "*et alius*" or "*et alii*," is not strictly correct in this sense; "*et al.*" really stands for "*et alibi*," meaning "and elsewhere."