from the original Latin), or how the deception was not apparently commented upon by those familiar with Vicary's book. Caius has been blamed for instigating the plagiarism of Vesalius's great work, and it has also been suggested that Geminus is a punning pseudonym hiding the identity of Dr. Thomas Twyne, who translated other Latin works, but the association of the Vesalian plates with the Vicary script seems rather to implicate Vicary as the possible moving spirit behind this piece of artistic piracy.

There are other mysteries concerning Geminus, and not the least intriguing are how exactly his copperplates were acquired for French editions of the *Compendiosa* by Jacques Grevin, the French humanist, or how the same or similar copperplates were available for the *Anatomia Deusch*, first published in Nuremberg in 1551, and for other German and Dutch anatomical works. Apparently Geminus had widespread connexions. Other points arise from Dr. Underwood's remarks on Geminus, and one of topical interest will be mentioned. Is the engraving on the title-page of the 1559 edition of his book a portrait of Elizabeth I? It was intended to be Queen Mary, but Queen Elizabeth had ascended the throne before the edition could be published, so the engraving (possibly with a few alterations) remained, with a fulsome dedication to the new Queen added.—I am, etc.,

Manchester.

G. A. G. MITCHELL.

The Judet Operation

SIR,—Mr. T. M. Hennebry (*Journal*, May 23, p. 1166) has stated a case in favour of the Judet operation for osteoarthritis of the hip. I would like to question some of the points he raises.

It is not reasonable to compare the results of the Judet operation for osteoarthritis with those following a fractured femoral neck. In osteoarthritis the acetabular cartilage is grossly abnormal at the time of operation. In my experience it has been unusual to find a fractured neck of femur with marked osteoarthritis. It is likely that many of the cases of fracture following the Judet operation will subsequently become osteoarthritic and painful owing to the incongruity of the surfaces. This certainly occurs after other causes of incongruity. It may, however, require a number of years for these changes to occur, and I think it is fair to say that no one yet is in a position to assess the frequency of this complication. As the majority are in the elderly, with a high mortality in the ten years after operation, it is probable that a satisfactory statistical survey on this point will take many years. This last fact justifies its use in these cases.

I would agree that many cases of osteoarthritis have a thickening of the capsule and periarticular structures which restrict movement and are certainly, in part, responsible for the pain. Your correspondent suggests that it is in this type of case with a marked contracture that the Judet operation may fail. Osteotomy in this case is almost uniformly successful in relieving the pain. This, after all, is the predominant, and often the only, complaint of the patient.

As Mr. Hennebry says in his letter, this prosthesis is "far from being the final solution." This is becoming increasingly obvious with the passage of time. His suggestion that displacement osteotomy is a retrograde step is surely a failure to recognize its indications.—I am, etc.,

Harlow Wood, Notts.

J. P. JACKSON.

Treatment of Pulmonary Emphysema by Pneumoperitoneum

SIR,—We have read with particular interest the report of Drs. R. D. C. Brackenridge and A. Thelwall Jones on the treatment of pulmonary emphysema by pneumoperitoneum (*Journal*, May 23, p. 1135). For the past twelve months we have been engaged on, and have now terminated, a similar investigation on this very problem. Without wishing to anticipate the results of our report, which are now ready for publication, we wish to pass the following comments on their paper.

Vital capacity is an obsolete yardstick in the assessment of respiratory function. Three-second spirometric tests presuppose a high degree of experimental accuracy, and assume the absence of inspiratory dyspnoea.¹ Maximum breathing capacity is a much more accurate index of lung function, and there is much to commend its employment.² However, even here the skill, degree of experience, co-operation, and education of the patient are factors which have to be taken into consideration in the assessment of readings.

Broadly our findings are not as encouraging as those obtained by Drs. Brackenridge and Jones. Yet in a number of instances our emphysematous patients, after pneumoperitoneum, have expressed themselves as being subjectively improved in health and have stated that their dyspnoea has lessened. However, a critical evaluation of some of the variable factors involved in the assessment of dyspnoea—season, climate, intercurrent infection, bronchial spasm, and wishful thinking on the part of the patient—ought to make for the greatest caution by investigators in their interpretation of slightly beneficial or equivocal results. We feel that this view is probably true of the role of pneumoperitoneum in the assessment of pulmonary emphysema.—We are, etc.,

BERTRAM MANN.

E. A. MURPHY.

Halifax.

REFERENCES

- ¹ Furman, R. H., and Callaway, J. J. (1950). *Dis. Chest*, **18**, 232.
- ² Donald, K. W. (1953). *British Medical Journal*, **1**, 415.

The Degradation of Flour and Bread

SIR,—I was interested to see Dr. E. H. M. Milligan's letter on the above subject (*Journal*, May 2, p. 994), for L. J. Harris¹ states that "most expert opinion now agrees that the average working-class diet in this country is so frequently low in vitamin B₁ that it would be an advantage to encourage an increased consumption of wholemeal bread." But of late there has been an increasing tendency for cases of vitamin B₂ deficiency to arise, as instanced by the frequency of beefy sore tongues and undoubted pellagrous dermatitis masquerading under the pseudonyms of neurodermatitis or even industrial dermatitis. According to Harris,² it is not uncommon for pellagra to occur in mental patients in this country, although it appears that the medical and nursing staffs escape this condition. It is open to question whether the hospital diet is at fault, or whether they are long-standing unrecognized cases of B₂ deficiency which had reached the last stage of all—dementia. When Sydenstricker visited this country during the late war he found a similar state of affairs. The fact that, despite the so-called restoration of flour, cases of nicotinamide deficiency do arise makes one ponder that all is not well; and it appears that matters will worsen when the extraction rate of flour is again raised. Furthermore, cases of acute encephalopathy and confusional insanity are known to arise, especially in the elderly, after severe operations such as hysterectomy or prostatectomy, which are similar in most respects to delirium tremens and curable with adequate doses of nicotinamide.—I am, etc.,

Heanor, Derbyshire.

PHILIP TURTON.

REFERENCES

- ¹ *Vitamins and Vitamin Deficiencies*, 1938, vol. 1, p. 137. J. and A. Churchill, London.
- ² *Vitamins. A Digest of Current Knowledge*, 1951. J. and A. Churchill, London.

Antabuse Addiction

SIR,—All those who deal with alcoholics have observed the variability of the antabuse-alcohol reaction in different subjects. This variability is to be expected, for the aversion effect of antabuse therapy does not depend on the physical symptoms when alcohol is taken—the vasodilatation, headache, tachycardia, and nausea—but on the concurrent subjective state of the patient. This is a feeling of impending personal catastrophe which, like tolerance of pain, varies from subject to subject. A great many psychopathic drinkers show a magnificent tolerance for acetaldehyde, and considerable bravado. They often claim that a small gin

makes them feel like several doubles when on antabuse. It is noticeable, however, that they prefer to omit their antabuse. The more labile psychoneurotic is often profoundly disturbed by the antabuse-alcohol reaction and avoids alcohol.

A small group of patients has emerged, however, who, in spite of recurrent terrifying experiences with the reaction, repeatedly ask to be put back on antabuse. Their assertion that they are now certain that this will stop their drinking appears to be a rationalization, for in a short time they proceed to drink again, even carrying antabuse tablets with them in some cases and swallowing more of them whilst drinking. These patients obviously tend to become rapidly confused, restless, and uncoordinated whilst indulging in this procedure. They also seem to show an increased tendency to self-reproach when sober. Can it be that these patients incorporate antabuse into their drinking pattern not only to achieve more rapid escape from insupportable tension but also to inflict simultaneously the punishment demanded by a harsh super-ego which is, of course, part of that tension?

However this may be, these patients show the surprising tendency to seek antabuse as an adjunct to their drinking, and they thus appear to be unsuitable cases for treatment with the drug.—I am, etc.,

Twyford.

L. C. F. CHEVENS.

Smoking and Cancer of the Lung

SIR.—Mr. P. G. Moore's letter (*Journal*, June 6, p. 1281) obscures very nicely the point which we wish to make (*Journal*, May 16, p. 1105), and is far from giving the precision he suggests. Diphtheria has been virtually wiped out as a cause of death in this country. This has had very little effect on the expectation of life, because the large number of children who never had the disease are included in this figure. But the chance of dying between the ages of 1 and 15 has been materially decreased, because diphtheria used to cause a considerable proportion of deaths between these ages. In exactly the same way, even if lung cancer were abolished, the expectation of life would not be changed very much, but the chance of dying in middle age would, because lung cancer is an important cause of death at this age.

The expectation of life, or mean future life time, at any age, if considered by itself, has the same limitation as any other mean value in that it gives no information concerning the shape of the distribution from which it is calculated. It is for this reason that it is rarely used by actuaries in the comparison of mortality. Mr. Moore's figures, if taken in conjunction with those in our letter, will serve a most useful purpose in providing a practical demonstration that an apparently small difference in the expectation of life may conceal a substantial difference in mortality.—We are, etc.,

London, N.W.10.
London, W.1.

J. A. HEADY.
R. G. BARLEY.

Limb Injuries in Coal-miners

SIR.—Dr. C. T. H. Whiteside in his letter (*Journal*, May 30, p. 1222) remarks that it would be interesting to know if the high percentage of limb injuries which he found in a colliery in Kent is representative of the country's coal-mines as a whole. A very detailed accident analysis is made by the South Western Division of the National Coal Board and figures showing the part of the body injured can be extracted. In the year 1951, among a population of 106,000 miners, injuries to the limbs accounted for 61% of all injuries causing absence of more than three days' duration (upper limb 36%, lower limb 25%). These figures support Mr. Whiteside's contention that limb injuries constitute the greater proportion of all injuries sustained in the coal-mines. The analogy which he draws between war, in which about 50% of the total injuries are limb injuries, and coal-mining is not in my opinion particularly appropriate. If a little thought be given to the nature of coal-mining operations it will not seem so surprising that limb injuries are predom-

inant. A more appropriate analogy might be the proportion of limb injuries in heavy industry other than coal-mining.

Dr. Whiteside's estimate that there are about 250,000 accidents per year, each causing absence of more than three days, among the total mining population is fairly accurate, and it is undeniable that this is a startling and appalling figure. It should be borne in mind, however, that this figure may be swollen by changes in the law relating to compensation and that the fatal accident rate, which cannot be thus affected, has been falling steadily for many years. The number of fatal accidents between 1922 and 1940 remained around or above 0.40 per 100,000 man shifts worked. After a rise in 1941 and 1942 the rate declined more or less steadily to 0.25 in 1948 and 1949, the 1952 figure being 0.23.

The mining industry is well aware of the seriousness of the accident problem, and is systematically attacking it in a number of different ways. The industry is also fully seized of the necessity for active research, and the N.C.B. are at present supporting two research projects which have the aim of, *inter alia*, defining the causes of accidents in all their technical detail. In these investigations the importance of limb injuries, which Dr. Whiteside has emphasized, will not be overlooked.—I am, etc.,

Medical Service, National Coal Board,
London, S.W.1.

J. S. McLINTOCK.

Transverse Arrest of Head

SIR.—May I refer to some of the points raised in the discussion on transverse arrest of the head? When I wrote my article (*Journal*, April 18, p. 865) I was not aware of the teaching of Mr. Wilfred Shaw on this subject, and I regret, therefore, that I did not refer to the very clear account of this complication which he gave in 1933.¹ Also the monograph by Mr. Parry Jones on the Kielland forceps² had not yet appeared. This important work is a credit to British obstetrics, and should be studied by all who use or intend to use this instrument.

Much of the discussion has centred around the use of the Kielland forceps, and there is now general recognition of its value. Its introduction has constituted, I believe, a big obstetrical advance, not because it possesses any inherent magical properties, but because its use demands a careful study of each case and a proper cephalic application. Mr. Parry Jones in his letter (*Journal*, June 6, p. 1278) has drawn attention to the important point that the "wandering method" of application is almost as classical as the one involving rotation of the anterior blade.

I did not intend to give the impression, as Mr. A. P. Bentall suggests (*Journal*, May 16, p. 1107), that cases of transverse arrest can only be dealt with by those who have mastered the use of this instrument, nor did I intend, as Mr. Rutherford Morison fears (*Journal*, May 16, p. 1107), to exclude the general-practitioner obstetrician from using this instrument. I believe, however, that all who may be up against this complication will be the better able to deal with it if they have studied the technique of using the Kielland forceps. Mr. Bentall disagrees with my statement that deep general anaesthesia is necessary for manual rotation. He admits, however, the necessity for rotation of the shoulders with this manoeuvre, and Munro Kerr and Chassar Moir³ refer to the need for "deep surgical anaesthesia."

Dr. J. D. Martin (*Journal*, May 16, p. 1107) himself admits the difficulty of comparing the various figures for the foetal risk for the various methods of instrumental delivery in the true occipito-posterior positions. I feel, however, that my figures showing only one foetal death in 55 primigravidae delivered in the face-to-pubes position with forceps justify the claim that this method of delivery has a low foetal risk. Admittedly with this technique the strain on the soft tissues is great, and the risk of severe lacerations in unskilled hands is high. Manual or forceps rotation, however, is also not free from serious risk in this respect.—I am, etc.,

Middlesbrough.

BRYAN WILLIAMS.

REFERENCES

- ¹ *Practitioner*, 1933, 131, 685.
- ² *Kielland's Forceps*, 1952, Butterworth and Co. (Publishers), Ltd., London.
- ³ *Operative Obstetrics*, 1949, 5th ed., p. 131, Baillière, Tindall and Cox, London.