and brawn concerned were both nasal carriers of the incriminated type of staphylococcus, and one had a septic finger. The typing of staphylococci has also served to explain the occurrence of infection in both infants and mothers in maternity hospitals, although here it has not so much verified a single source of infection as proved that the responsible strain has extensively colonized the staff of the institution. The facility with which a penicillin-resistant type of staphylococcus, notably that designated as 52A, can establish and maintain itself in such institutions (its regular habitat being the noses of the majority of the nursing staff) is one of the major unsolved problems in epidemiology at the present day.

All who have seen this method at work and consequently know the value of the precise and detailed information which it can provide will agree that these refinements in technique rival, if they do not surpass, any method employed in criminology. There need be very few unsolved problems in the epidemiology of these infections in the future, and the extension of the method to other forms of disease and its application in other ways foreshadowed in this lecture may be expected to yield further valuable results.

THE DISTRIBUTION SCHEME

The Working Party's scheme for the redistribution of the central pool has drawn, as our correspondence columns have shown, some of the fire of criticism which any proposals of such importance must expect. In contentious matters of this kind critics tend to go wide of the mark, and Dr. Charles Schiff's assurance[1] is to be welcomed when he says, "I certainly did not for one moment intend to suggest that the members of the negotiating body or of the G.M.S. Committee were actuated by other than the purest motives in pursuing the course they considered best for the profession."

Letters received over some weeks have shown that the points of criticism of the Working Party's scheme remain substantially unchanged. Young practitioners, or those speaking for them, have been the chief complainants. They want bigger incomes for the small-list beginner and smaller incomes for the big-list man. They complain that the position of those practitioners least favourably placed under the present distribution will be relatively worsened instead of improved. They think that the distribution scheme does not encourage partnerships sufficiently and that it favours too much the man who is a permanent employer of assistants without a view.

Faced with the infinite variety of general practice and its practitioners, those who had the task of distributing £10m. in the best interests of general practice (so far as remuneration was concerned) had a far from straightforward problem to solve, for any distribution scheme was bound to leave some recipients unhappy. In healthy competitive medical practice—and without competition the healthiness of general practice would be in doubt—there always must be, and always has been, an element of fortune, but this element is less now than when there was no distribution scheme to take the blame for financial hardship. A simple and, in the minds of some, a fair solution would be an even, all-round increase of the capitation fee. Such an arrangement would at least be in accordance with the sound principle of relating pay to responsibility and work done. The solution of the Working Party, bound as it was to its terms of reference and to the recommendations of the Spens Committee, had to be more complex. It accepted the further restriction of lists and so a restriction of the earnings of the hard-working big-list practitioner; it tried to help the unestablished young practitioner, and to give the greatest encouragement to a middle group with lists of average size. Whatever opinions the critics may hold of the likely effects of the Working Party's scheme, they are wrong to suggest that the welfare of the young practitioners has been neglected. These should remember that their interests are bound up with the advancement of general practice as a whole. A sound practice is not static, and to rob the Peter of the good established practice to subsidize the Paul of the unestablished practice would be to deprive general practice and its future practitioners of much healthy enterprise. It would, in fact, encourage the salaried-service mentality.

As reported in this week's *Supplement*, the General Medical Services Committee at its meeting on September 18 decided, in the light of the rider passed by the special conference[2] of local medical committees on June 26, to set up a subcommittee to investigate the position of any groups of practitioners who may not benefit as intended from the recommendations of the Working Party, and to suggest such remedies as may be necessary. In addition, local medical committees are to be asked to report any special cases in their areas. A year's experience of the scheme in practice will give the answer to many questions, particularly in regard to the effect it will have in encouraging partnerships.

CORONERS' INQUESTS

Most doctors at some time during their career find themselves giving evidence at that curious survival of mediaeval England, the coroner's inquest. The origin of the coroner is lost in the Dark Ages. It is said by some that the office existed in England before the Norman conquest. It certainly existed in the time

[1] *British Medical Journal Supplement*, September 13, p. 129.
[2] Ibid., July 5, p. 1.

of Henry I and has continued ever since. Coroners' rights and obligations are now regulated principally by the Coroners Acts of 1887 and 1892 and the Coroners (Amendment) Act, 1926. Coroners have never existed in Scotland. Many people hold that in England they have outlived their usefulness and should be abolished.

The coroner's principal duties are to inquire into the cause of death of persons found dead within his jurisdiction when there is reasonable cause to suppose that death was either violent or unnatural, or was sudden and of an unknown cause; to hold inquests upon treasure trove; in the City of London to hold inquests upon the outbreak of fires; and to act occasionally in place of the sheriff. Until 1938 it was he who pronounced judgment in outlawry. It is only in connexion with the first of these duties that coroners, except on the rarest occasions, now function.

The object of the inquest, therefore, is to inquire into the cause of death, and accordingly it is the duty of the coroner to receive any evidence of this that he can find, as it is the duty of anyone who knows anything which may cast light on the cause of death to offer evidence to the coroner. In practice, statements are taken by the coroner's officer from anyone who is likely to be able to help, and these, together with the pathologist's report, form the basis of the coroner's oral examination of the witnesses at the inquest.

Interested parties, such as the relations of the deceased or his employers, and particularly anyone who may be blamed for the death, are entitled to attend the inquest, though the coroner has a judicial discretion to exclude the public or any individual. It is established practice that counsel or solicitors should be allowed to attend and examine or cross-examine the witnesses, though they do so only by the coroner's leave and are not allowed to make speeches except by dressing them up as cross-examination.

Unless the death has been caused by negligence on somebody's part so gross as to justify a verdict of manslaughter, it is no part of the coroner's duty to apportion blame or to investigate responsibility for the death except in so far as such an investigation is unavoidable in investigating its cause. But the inquest affords interested parties such as the relatives of the deceased an excellent opportunity for eliciting the facts surrounding the death and getting them recorded in the depositions while they are fresh in the witnesses' minds. This may be of great value in later civil proceedings arising out of the death, for in these the depositions can be used to cross-examine a witness who has changed his story. Although, therefore, the coroner should not be interested in civil responsibility for the death, the cross-examination at an inquest is generally and often vigorously devoted to allocating blame and fishing for negligence. A not uncommon result is that the coroner's jury, a body of men drawn from a field not restricted by the modest qualifications required by jurors at assizes or quarter-sessions or in the High Court, adds a "rider" in which it allocates blame or recommends remedies to prevent recurrence of disasters it thinks should have been avoided.

Two things are certain about a coroner's jury's rider: it is in law no part of the verdict; and it will be reported in the Press. Here it may often cause grave and undeserved damage to reputation, and the victim has no redress. Riders have become a feature of inquests which, though their origin is obscure, is now hallowed by tradition. What a rider is, and why a jury should be allowed to make it when it is no part of the verdict which it is the jury's function to return, is incomprehensible.

The coroner's inquest is a matter which no doctor called to give evidence before it should take lightly, since he is open to the potential danger of a damaging rider by the jury. Whether this danger can be abolished without the abolition of the whole system may become clearer when the report of the interdepartmental committee on the scope and duties of coroners courts is published.

FIELD RESEARCH ON CANCER PATHOGENESIS

As more and more carcinogenic agents are being identified, the possibility that malignant growths in some parts of the body are initiated by substances continually being ingested or inhaled in small quantities cannot be ignored. Studies of occupational mortality have shown that cancer of the oesophagus—and also of the larynx, mouth, and rectum—occurs more often than among the male population generally in groups of men whose occupations are usually associated with regular and heavy drinking, and that bladder tumours arise with notable frequency among men who have worked for long periods with certain chemicals handled in the manufacture of dyes. The statistical evidence is now very strong that bronchogenic carcinoma is connected with the inhalation of carcinogenic substances present in tobacco[1] and in the smoke from domestic chimneys,[2] though the nature of these carcinogens has yet to be established. Elsewhere in this issue we publish an interesting paper by Mr. C. D. Legon, who has found that in some areas of the country a high mortality from cancer is associated with a high content of organic matter in the soil.

It was first shown in the Registrar-General's occupational mortality analysis of 1921–3[3] that the incidence of cancer of the stomach among men must be influenced

[1] Doll, R., and Hill, A. B., *British Medical Journal*, 1950, **2**, 739.
[2] Stocks, P., *Brit. J. Cancer*, 1952, **6**, 99.
[3] *Registrar General's Decennial Supplement*, 1921, "Occupational Mortality and Fertility," 1927, London
[4] *Registrar General's Decennial Supplement*, 1931, "Occupational Mortality," 1938, London
[5] Stocks, P., *Regional and Local Differences in Cancer Death Rates*, Studies on Medical and Population Subjects, No. 1, 1947, London.
[6] Stocks, P., *Brit. J. Cancer*, 1950, **4**, 147.