

methyl mercuric iodide, methyl mercuric hydroxide, *n*-propyl mercuric chloride and phenyl mercuric iodide.

Summary

A large number of organo-lead compounds have been prepared and tested as potential sternutators at Cambridge. They have been examined at nominal concentrations (for example, 1 in 1,000,000, 1 in 10,000,000 and 1 in 25,000,000) in a 10-cubic metre chamber, the material being dispersed by spraying a solution in alcohol or ether. Four observers (members of the team) entered the chamber for each experiment.

From the results of the experiments, the compounds were placed in various categories with reference to triethyl lead chloride as an arbitrary standard. It has been established in respect of sternutatory power that:

(1) Salts of the trimethyl lead, $(\text{CH}_3)_3\text{Pb}^+$, series are markedly inferior to those of the triethyl lead, $(\text{C}_2\text{H}_5)_3\text{Pb}^+$, series.

(2) Salts of the tri-*n*-propyl lead series are superior to the corresponding compounds in the triethyl series. In fact, there appears to be a peak of activity in the tri-*n*-propyl series, derivatives of tri-*n*-butyl lead and above exhibiting diminishing activity.

(3) Derivatives of the monovalent ion (for example, $(\text{C}_2\text{H}_5)_3\text{Pb}^+$) are greatly superior to derivatives of the divalent ion (for example, $(\text{C}_2\text{H}_5)_2\text{Pb}^{++}$).

(4) Within a given series, salts of organic acids (for example, the acetate or acrylate) are usually superior to salts of inorganic acids (such as the chloride). The β -chloropropionates and acrylates are particularly potent.

(5) A new series of substituted sulphonamides of the type $\text{RSO}_2\text{NR}'\text{PbR}''$, has been synthesized. These are of particular interest. They are easily prepared and are powerful sternutators. As in other series, the tri-*n*-propyl lead derivatives are the most potent, and tri-*n*-propyl lead methane sulphonamide is only slightly less potent than the best arsenicals.

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The following took part in these investigations at Cambridge.

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¹ Krause and Pohland, *Ber.*, **55**, 1282 (1922).

² Gilman and Robinson, *Rec. Trav. Chim.*, **49**, 766 (1930).

³ McCombie, H., and Saunders, B. C., Report to Ministry of Supply, October 22, 1940.

⁴ McCombie, H., and Saunders, B. C., Summary to Ministry of Supply up to October 31, 1940.

⁵ McCombie, H., and Saunders, B. C., Report to Ministry of Supply, Oct. 31–Dec. 31, 1940.

⁶ McCombie, H., and Saunders, B. C., Summary to Ministry of Supply, Oct. 31–Dec. 31, 1940.

⁷ McCombie, H., and Saunders, B. C., Report to Ministry of Supply, Jan. 1–March 31, 1941.

⁸ McCombie, H., and Saunders, B. C., Summary to Ministry of Supply, Jan. 1–March 31, 1941.

⁹ McCombie, H., and Saunders, B. C., Report to Ministry of Supply, April 1–June 30, 1941.

¹⁰ McCombie, H., and Saunders, B. C., Summary to Ministry of Supply, April 1–June 30, 1941.

¹¹ McCombie, H., and Saunders, B. C., Report to Ministry of Supply, July 1–Aug. 25, 1941.

¹² McCombie, H., and Saunders, B. C., Summary to Ministry of Supply, July 1–Aug. 25, 1941.

SOCIAL MEDICINE AND SOCIAL PATHOLOGY

By DR. IAGO GALDSTON

New York Academy of Medicine

THE centenary celebration of the New York Academy of Medicine was initiated with a dinner-meeting at the Waldorf-Astoria Hotel on March 6, 1947. Twelve hundred fellows and friends of the Academy gathered in the main ballroom of the hotel and, after dinner, listened to the addresses of the president of the Academy, Dr. George Baehr, and of the guest of honour and principal speaker, Prof. John A. Ryle, professor of social medicine in the University of Oxford.

Dr. Baehr, in his presidential discourse, reviewed the history of the Academy and outlined its anticipated developments in the near future. Prof. Ryle, in his address, discussed the meaning and significance of social medicine and social pathology. Prof. Ryle's address was particularly pertinent in the light of the four-year study which has been conducted by the Academy's Committee on Medicine and the Changing Order. The report of this Committee is to be published shortly.

There is a fairly widespread appreciation in the United States that a substantial number of those items in medical care about which there has been so much discussion (labelled here as "socialized medicine") must and will find a solution in the application of the philosophy and techniques advanced under the head of social medicine.

Prof. Ryle drew upon his thirty years of clinical experience in medicine to bring into prominence the deficiencies in the current teaching and practice of remedial medicine. "I have watched," Prof. Ryle said, "disease in the ward being studied more and more thoroughly—if not always more thoughtfully—through the higher power of the microscope; man in disease being investigated by more and more elaborate techniques and, on the whole, more and more mechanically. Man, as a person and a member of a family and of much larger social groups, with his health and sickness intimately bound up with the conditions of his life and work—in the home, the mine, the factory, the shop, the official on the land—and with his economic opportunity, has been inadequately considered in this period by the clinical teacher and hospital research worker.

"The morbid 'material' of the hospital ward consists very largely—if we exclude the emergencies—of end-result conditions for which, as a rule, only a limited amount of relief repays the long stay, the patient investigation and the anxious expectancy of the sick man or woman.

"With etiology—the first essential for prevention—and with prevention itself the majority of physicians and surgeons have curiously little concern. Nor have they at present the opportunity, nor yet the appropriate types of training or assistance, requisite for the study of etiology or prevention. Their material is mainly selected by four factors: the gravity, the difficulty or the rarity of their cases, or their suitability otherwise for admission to a hospital. Some of the most common diseases, the less lethal diseases and the beginnings of disease are even considered as providing 'poor teacher material'. Health and sickness in the population and their possible correla-

tions with significant and measurable social or occupational influences are outside their province."

Prof. Ryle then cited in illustration a number of diseases, including gastric and duodenal ulcers, which it is not likely that we will master "until we study the victims of the disease at first hand and in relation to their work, their total occupational experience, their communities, their food, their habits and anxieties, and their innate predispositions".

These procedures involve the development of the science of 'social pathology' and 'hygiology', for "the study of the ultimate causes of disease—without which the specific factors can never find their opportunity—goes hand in hand with the study of the causes of health, and how much we have still to learn of the meaning and measurement of health".

Prof. Ryle further defined social pathology as "the medicine and pathology of families, groups, societies or larger populations. Just as human pathology is the related science of clinical medicine—so may social pathology be viewed as the related science of social medicine. Social medicine embraces, on the one hand, the whole of the activities of the public health administration and of the remedial and allied social services, and, on the other, the special disciplines necessary for the advancement of knowledge relating to sickness and health in the community".

Prof. Ryle emphasized the pertinence of his plea, quoting Julian Huxley, who has described current events as a "transition now in progress from the age of 'economic man' to the age of 'social man'. Our profession which is so particularly concerned with man and his welfare," said Prof. Ryle, "must assist this transition with all the scientific and humanist wisdom at its command. Hitherto, our science, like our practice, has evolved along individualist lines. Whatever the several countries may do with regard to the modification of their systems of practice and of service, it seems to me that the scientific study of health and disease in man—the most complex of all social animals—must henceforward concern itself to an ever-increasing degree with the interactions and correlations of disease and health with changing social circumstances. Socially, industrially, politically, we are creating a new age. With it, inevitably, we alter the whole character and distribution of diseases and set ourselves new problems for solution in the fields of medical science, practice and administration."

Prof. Ryle's thesis fitted in very appropriately with the general spirit of the centennial celebration of the New York Academy of Medicine and served as a splendid introduction to the 'Institutes' that have been planned as a part of the centenary celebration; notably the Institutes on Social Medicine, Public Health, and Medical Education. He took part in the Institute on Social Medicine during March 19, 20 and 21, the sessions of which were devoted to the discussion of the following topics: The Changing Concepts of the Relation of Medicine to Society; Social Medicine—Its Differentiation From and Relation to Clinical and Preventive Medicine; Epidemiology in Social Medicine; The Place of Nutrition in Social Medicine; Social Psychiatry and Social Medicine; Social Applications of Psychiatry. The Institute ended with a dinner meeting on March 21, at which Lord Horder, consulting physician to St. Bartholomew's Hospital, London, delivered an address on "Social Medicine: The Appeal of the Common Man".

OBITUARIES

Prof. Pierre Janet

PIERRE JANET, who died in Paris on February 24 at the age of eighty-seven, played a notable part in the development of clinical psychology. He took a degree in philosophy in 1882, and some of his best work was done before taking his degree in medicine eleven years later. He held various academic posts before becoming a professor at the Sorbonne, and was for a time in charge of the psychological laboratory attached to the Salpêtrière Clinic. It is not easy to trace his personal relationship with Charcot at that period, and their fundamental attitudes were very different. Thus, in his account of the controversy (c. 1886) when Bernheim showed that Charcot's phenomena of hysteria and hypnotism were artefacts, "the results of unskilled suggestion and involuntary training", he wrote ("Principles of Psychotherapy", trans., London, 1925; p. 30): "The victory of the animists was not well received, at least in the scientific world. They acknowledged it but deplored it. The doctrine of Charcot that it defeated was clear, definite, and easy to study; it seemed to bring animal magnetism within the limits of physiology, and that looked like scientific progress."

In 1889 Janet wrote "L'Automatisme Psychologique", in which his conception of dissociation of consciousness subsumes under one formula such apparently disparate manifestations as water-divining, mediumism, the bodily symptoms of hysteria, amnesias, fugues and somnambulisms. In view of the persisting popular belief in the dowser's rod it may be noted that, after describing its use in the pursuit of criminals and the finding of buried treasure, he wrote: "Il est probable que, dans quelques campagnes, subsiste encore la croyance aux révélations de la baguette divinatoire". As a description of what may be supposed to happen in the superficial layers of the mind the theory of dissociation is not incompatible with psychoanalysis, which Janet, however, was not able to accept. In "Les Obsessions et la Psychasthénie", written jointly with F. Raymond in 1903, scarcely any of the bizarre symptoms of these conditions escape recognition. Many are described for the first time, and the writers were a generation ahead in many observations, such as the recognition of writers' cramp as a psychogenic disorder. It is a pity that Janet's word 'psychasthenia' has fallen into disuse, for it avoids the metaphysical assumptions involved in the use of such words as 'neurasthenia' or 'neurosis' to denote pathological mental states.

Much of Janet's writing has been translated and published in Britain and in America. Running through all is an emphasis upon the history of psychopathology, which helps in the understanding of some fundamental differences of opinion that still exist. It must be admitted that his work received little recognition from the medical profession in France, for the spirit of the times was not yet in accord with his psychological approach. In the First World War the French were quick to recognize the importance of psychoneuroses in soldiers; but in their plentiful literature on the subject there seems to be no reference to his teachings. In Great Britain, however, the application of his work on amnesia threw light upon these conditions, and in the Second World War the use of pentothal in the revival of war memories was a tribute to his observation that