Correspondence

NEW DRUG CONTROL LEGIS-LATION NEEDED

To the Editor:—The recent tragic deaths from elixir sulfanilamide have brought quite vividly to the public's attention the extreme danger of taking medicine without thorough experimental and clinical trial. The time seems ripe now for us to see that legislation is enacted and rigidly enforced against:

- 1. Any drug or medicine sold to the public not acceptable to the Council on Pharmacy and Chemistry of the American Medical Association.
- 2. Druggists and drug clerks prescribing "over the counter." Any doctor or any one else prescribing drugs without knowledge of their property, actions, uses and contraindications should be condemned most heartily.

Why drugs in the U. S. Pharmacopeia, the National Formulary and New and Nonofficial Remedies are not adequate is quite a mystery to me. One can surely find the desired product in one of these three sources if one would only take the necessary time to look it up.

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THE RECORD OF THE PATIENT'S HISTORY

To the Editor:—A well taken history is complementary to a well done physical examination. A skilled historian needs no special history form and, indeed, may rise above the handicap of a grossly inadequate one. The student, however, is much influenced in his career by the form with which he is first familiarized. It is interesting to observe with what tenacity the student in his subsequent professional career sticks to habits ingrained as an undergraduate. I wish to suggest a minor revision of the standard medical history form.

The standard history form is broadly divided into History of the Present Illness, Personal Medical History, and Family History. The divisions H. P. I. and P. M. H. may be justified on the basis of expediency but lead to the development of a narrow perspective with reference to the development of disease processes. I believe that the history of the present illness and the personal medical history ought to be incorporated under a single heading. Beginning chronologically with infancy, then developing the medical history year by year, and episode by episode, and leading up to current aspects of the case, leads to a concept of the case, and a picture of development of disease processes as a continuous whole. The classification History of the Present Illness is largely inspired by the psychology of a layman patient who dates the onset of his illness from his first incapacity, disability or symptom, even though the physician does carry the history of the present illness back somewhat more remotely.

The scientific ideal in history taking should, however, be an attempt to trace an illness back to its hereditary or remote environmental origins. For the present, it must suffice to trace an illness back to childhood or infancy. In an acutely developing hemiplegia where does the present illness begin? With the onset of aberrations of consciousness? With the onset of paralysis? This is rather loose medical thinking. The present illness began many years previously with occasional breathlessness on effort, occasional headache, transitory paresthesias. Limiting the history of the present illness to a recent dramatic episode of a long drawn out illness represents layman psychology. An adolescent has hepatomegaly, ascites and a positive blood Wassermann reaction. Did not his present illness begin with the generalized rash in infancy, followed by bone lesions and iritis? Did not the patient with mitral stenosis begin his present illness with repeated upper respiratory infections and anemia antedating by many years his first recent hemoptysis? In the adult with pulmonary tuberculosis did not his present illness begin in early childhood with recurrent febrile episodes, repeated respiratory episodes? In a case of acute cardiac infarction, the present illness did not develop recently with dramatic suddeness but rather with the slight dyspnea of many years ago, an occasional cough, occasional visual disturbances, and nocturia of some years past.

One might ask wherein lies any significant difference between the standard form subdivided into History of the Present Illness and Personal Medical History and a revised form embracing both of these under a single heading, Medical History (M. H.). Let me repeat again that in the case of the skilled historian this may be of no importance but for purposes of student training of considerable importance. A form helps establish a point of view and serves as a channel to direct the historian properly. That some change in the present form is necessary is evidenced by the following:

- 1. A review of a large number of hospital charts will show that the space allotted to the personal medical history averages about 5 to 10 per cent of the total history space.
- 2. The personal medical history usually consists of scant memoranda of the yes-no type under diseases and symptoms in contrast to the carefully written chronologically continuous narrative employed in the history of the present illness. Even granting that the greater length allotted the history of the present illness is for the development of symptoms which the patient demands be relieved, the scantiness of space and paucity of details in the average personal medical history a priori indicate an undue overemphasis on the history of the present illness. Facts essential to a clear conception of the evolution of a disease are slighted. If used subsequently for purposes of analysis, charts lack data indispensable in attempting to establish disease or symptom associations and etiologies.

The history pattern used by the psychiatrist could well serve as a model for a medical history. To the psychiatrist the apparently recent onset of mental symptoms is never anything but an episode in the development of psychologic processes whose roots run back to childhood and infancy. The psychiatrist thinks in terms of lifelong influences and a gradual unfolding of a personality. The identical point of view is applicable to somatic disease and should be imitated.

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RESUSCITATION

To the Editor:—Why is it that clinicians who nowadays generally recognize—at least in words—the dependence of the healing art on the fundamental sciences nevertheless often in practice neglect the plain teaching of those sciences and follow the suggestions of commercial advertisements and sales agents?

A case in point is the treatment of babies who, because of asphyxia or narcosis, fail to breathe spontaneously at birth. Anatomy teaches that the lungs of such babies are atelectatic; that is, collapsed. Physiology teaches that for respiration to be developed the lungs must first be at least partially inflated. Yet time after time for the past twenty-five years, under various names, a certain type of apparatus for artificial respiration that obviously violates the principles of both these sciences has been more or less successfully foisted on clinicians.

Such apparatus is designed and expressly advocated not only to blow air into the lungs, which, if effective and not too forcible, would do good, but also to suck air out of the lungs, and thus to keep the lungs collapsed, or again render them atelectatic.

The first and most celebrated of these appliances was the pulmotor. Back in the years 1912 and 1913 the National Electric Light Association, in order to obtain advice regarding electric shock, and the United States Bureau of Mines, for

advice on resuscitation from asphyxiation by mine gases, requested the American Medical Association to recommend a commission for investigation of the subject of resuscitation. The commission that was appointed included Dr. W. B. Cannon, chairman, Dr. S. J. Meltzer, Dr. Joseph Erlanger, Dr. G. W. Crile and me. After extensive investigation of all known methods of artificial respiration, this commission made certain positive recommendations which have now for many years been generally adopted; but it expressly disapproved the pulmotor. And, as the disapproval was directed to the principle involved, it applies not only to the pulmotor but equally to all apparatus of its type, of which the latest is the E. & J. resuscitator, advocated in a recent article in The Journal (Martinez, D. B.: The Mechanical Resuscitation of the New-Born: A Report of 500 Cases, The Journal, Aug. 14, 1937, p. 489).

The main argument offered for all such appliances is a demonstration of their capacity alternately to inflate a rubber bag (simulating the lungs) and then to suck it flat. The reversal from blowing to sucking is automatically induced by the resistance of the bag when full or empty. Of this feature of such apparatus the commission reported:

Inflation and deflation of a bag is deceptive, because the bag, unlike the air passages of the body, offers no resistance till full. As soon as the inspiratory blast meets an obstacle in the air passages, however, it is automatically cut off and turned into expiration, and thus frequently no efficient inspirations are performed. . . . The second harmful factor brought out by these experiments is the performance of expiration by suction. In normal respiration expiration is accomplished by a power that does not suck but drives out the air by the elasticity of the distended or compressed tissues, aided, sometimes, by muscular contraction. [After detailing its various lines of investigation in laboratory and clinic the commission report said:] Upon the basis of these observations, the conclusion was reached that the automatic mechanism of the pulmotor, although an ingenious technical contrivance, instead of assuring artificial respiration may interfere greatly with its efficiency, because the mechanism is liable to cut off inspiration prematurely.

In this verdict two other committees of investigation, one in 1918, the other in 1921, unanimously concurred (Report of the Commission on Resuscitation from Electric Shock, New York, National Electric Light Association, 1913. Report of the Committee on Resuscitation from Mine Gases, Technical Paper 77, U. S. Bureau of Mines, Washington, D. C., 1914. Work of the Commission on Electric Shock, editorial, The Journal, Nov. 1, 1913, p. 1637. Proceedings and Resolutions of the Third Resuscitation Commission, Science 48:563 [Dec. 6] 1918. Drinker, C. K., and Redfield, A. C.: J. Indust. Hyg. 6:109 [Aug.] 1923. Final Report of the Commission on Resuscitation from Carbon Monoxide Asphyxia, ibid. 6:125 [Aug.] 1923). Evidence, which I have more recently obtained from obstetricians who have tested the E. & J. resuscitator on asphyxial or deeply narcotized babies, is to the effect that it frequently merely "clicks" from inspiration to expiration and back to inspiration in rapid succession without producing any movement of air in or out of the lungs. In some cases also autopsy has shown definite injury to the lungs.

General experience with the Drinker apparatus affords evidence which bears on this topic. It indicates that mechanical artificial respiration should be confined to a succession of inspirations and should not include forced expirations. When the body is enclosed in the Drinker apparatus, negative pressure induces inspiration in essentially the same way as does positive pressure over the face with apparatus of the pulmotor type. In the Drinker apparatus forced expirations by positive pressure are now generally omitted. And as negative pressure over the face acts similarly, it also should be omitted. Artificial respiration confined to inspirations, either with the Drinker or the pulmotor type of apparatus, if not too forcible, can do no harm; but forced expiration with either type of apparatus can. If then, the principal objection to the pulmotor, the E. & J. resuscitator and similar devices is to be removed, negative pressure should be omitted. It should be added that, among the cases in which the E. & J. resuscitator has been used, the latest to come to my knowledge is one in which a child had to be removed for a time from a Drinker apparatus. During this time the E. & J. resuscitator was substituted but the child died.

What then should be recommended for the resuscitation of the new-born? First and foremost, obstetricians should be far more conservative than is often the case now in administering narcotics shortly before delivery (Bundesen, H. N.; Dalms, O. A.; Fishbein, W. I., and Hamm, G. E.: Mortality of the New-Born in Chicago During 1935, with Special Reference to the Premature, The Journal, July 25, 1936, p. 270. Hess, J. H.: The Chicago City Wide Plan for the Care of Premature Infants, ibid., Aug. 8, 1936, p. 400). There is ample evidence that such drugs act far more on the baby than on the mother (Henderson, Yandell: Respiratory Stimulants and Their Uses, THE JOURNAL, Feb. 6, 1937, p. 471). Doses that merely quiet her render the baby entirely apneic. Second, the passage of a soft catheter into the trachea of an apneic and flaccid baby is so simple an operation and insufflation by the Meltzer-Flagg technic (Flagg, P. J.: The Treatment of Postnatal Asphyxia, Am. J. Obst. & Gynec. 21:537 [April] 1931) is generally so effective that there is little justification for any other procedure.

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RECURRENT LARYNGEAL NERVE

To the Editor:—I have always felt that in any formal terminology the primary purpose to be achieved was the clear and concise exchange of information and ideas. Unfortunately, anatomists have not always considered clinical convenience in setting up word lists, and clinicians, especially in America, seem to abhor formality in names.

At the present time the BNA, which is just being adopted in some clinical circles, is being either discarded or markedly altered in anatomic circles. The current suggested changes seem to follow nationalistic manners of thought, if not actual political boundary lines.

To me the statement in the editorial in THE JOURNAL, July 17, "Injury to the recurrent laryngeal nerve was recorded in 8.2 per cent of the cases. In no instance was it bilateral or permanent" is perfectly clear and anatomically accurate. I am a little surprised that Dr. John F. Quinlan of San Francisco finds grounds for objection (Injury to the Recurrent Laryngeal Nerve, THE JOURNAL, September 4, p. 809). Considering the matter of terminology, I quote for convenience from the comparative tabulation prepared by the committee of the American Association of Anatomists. The list was to be used by the association members in considering proposed changes. The numbers preceding the names are cross reference notations from the American committee's list. BNA refers to the Basle Nomenclature, BR to the present approved British list, and NK to the list of the Nomenklatur-Kommission. Nerve branches not concerned with the present discussion have been omitted.

	BNA
AAA	
171:21	N. recurrens
171:25	N. laryngeus inferior
171: 26	Ramus anterior
171: 27	Ramus posterior
	BR
171: 21	N. laryngeus recurrens
171:25	Rami pharyngei
171:26	Rami laryngei
	NK
171:21	N. recurrens
171: 25	N. laryngeus caudalis
171: 26	Ramus ventralis
171 - 27	Ramus dorsalis

Since the designations "right" and "left" are omitted, the structures so named are normally bilateral. The right recurrent laryngeal nerve (to follow the language of the editorial and the BR) "recurs" about the right subclavian artery, near