high ideals in plan and execution you would, I am sure, give us congratulations and support. But all this is beside the mark, for the optical goods concession has been withdrawn from sale and no spectacles or eye-glasses will be sold at the exposition. So the matter is pleasantly settled. But I cannot refrain from giving you the facts as they were, because your accusation of selfishness and greed hurts.

GEORGE HOUGHBERRY, San Francisco,
Director, Division of Exploitation.

[COMMENT.—We are delighted to publish the preceding and congratulate the officials of the Panama-Pacific International Exposition on their action in this matter.—Ed.]

Should Friends of Patients be Admitted to the Operating-Room?

To the Editor:—A rather sad but unique accident occurred in my service at Harper Hospital, Detroit, October 30, which answers this question most convincingly in the negative. A friend of a patient insisted on being admitted to the operating-room. He was told that the privilege was not allowed by the rules of the hospital, but could not understand why it should be denied him. He maintained that as long as his own daughter was the nurse in charge of the case, and that the patient to be operated on was a dear friend, he surely would be able to withstand the strain of the operation without any evil effect, and after some discussion he was finally admitted. During the course of the operation this friend of the patient fainted and fell, striking his head on the mosaic floor. He bled from the nose and ears, and roentgenoscopy revealed a T fracture of the base of the skull. His condition is still critical.

Another even more disastrous accident occurred at the Kalamazoo Hospital not very long ago. In this case the patient's relative felt a feeling of faintness coming over him, and in order to rid himself of the disagreeable sensations walked over to an open window for more fresh air. He sat on the window-sill and while sitting there fainted away completely. He fell out of the window and in falling sustained a fracture of a cervical vertebra which proved fatal.

I cite these two cases just to show what evil results may follow the unnecessary practice of admitting friends of patients to the operating-room.

ANGUS McLEAN, M.D., Detroit.

Method of Sterilizing Rubber Gloves

To the Editor:—For three years I have been using the method of glove sterilization criticized by Dr. McDonald (*THE JOURNAL*, Nov. 8, 1913, p. 1735). Undoubtedly gloves covered with "blood, pus, serum or soap" would be impervious to the action of cyanid or alcohol; but in soap and hot water we have a very active agent for the removal of these "organic substances" from the smooth surface of the rubber glove, and most certainly the gloves are to be washed and rinsed, as stated in my article. Alcohol is conceded by most, if not all, authorities to be a most effective germicidal agent. Many of our most famous surgeons use no other method of hand sterilization than scrubbing with soap and water followed by alcohol.

The gloves made clean by soap and water and sterilized by alcohol are protected from subsequent infection by the talc-cyanid powder. It was not my intention to recommend these gloves for all purposes, but for obstetric work; and surely, when infection is known to exist prior to the use of the gloves they would be boiled subsequently before being treated with the cyanid solution. Theoretically they may not be sterile, but practically they surely seem to be. Theoretically gloves must be boiled for thirty minutes under a pressure of 15 pounds to be sterile, but practically how many men do boil their gloves under pressure, and for thirty minutes? My method is not ideal, but it is much more safe than the ungloved hand hurriedly washed, dipped into compound solution of cresol and used, which is by no means a rare occurrence among general practitioners in obstetric work.

RAY ERNEST SMITH, M.D., Rutland, Vt.

The Unscientific Prescribing of Complex Pharmacopoeial Mixtures

To the Editor:—Dr. Osborne's criticism and condemnation of certain pharmacopoeial mixtures (*THE JOURNAL*, Oct. 4, 1913, p. 1289) will undoubtedly be appreciated by the thoughtful and careful physician. If it is unscientific to prescribe ready-made patented or proprietary remedies when their exact composition is unknown to us, why is it not equally unscientific to use complex official preparations; some of the ingredients of which we generally do not remember? The fact that we usually know the therapeutic use of the preparation as a whole and its dose is not enough to justify our prescribing it. Every dose of medicine which the doctor gives his patient to swallow should have all its ingredients carefully considered and passed on by the prescriber. This can hardly be done with complex ready-made preparations, as the doctor seldom remembers their exact composition.

Just the other day, while in a drug-store in my neighborhood, I saw a prescription from a regular physician in good standing calling for paregoric, brown mixture, glycerin and water. The druggist told me that he called up the doctor on the telephone and informed him that brown mixture (*mistura glycyrrhizæ composita*) contains paregoric (camphorated tincture of opium) as one of its ingredients, and that glycerin enters into the composition of paregoric. The doctor thanked him and authorized him to leave out the paregoric and glycerin and dispense only the brown mixture and water.

Such errors we make daily just because it is impossible for the average practitioner to remember the composition of these mixtures.

Dr. Osborne's criticism well deserves the closest attention of every doctor.

L. BUCKLE, PH.G., M.D., New York.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

OPEN-AIR TREATMENT AND THE FLUELESS HEATER

To the Editor:—I may be, as you state in your reply to my note on "The Open-Air Treatment" and "The Flueless Gas-Heater," editorials (*THE JOURNAL*, Nov. 1, 1913, p. 1640), "evidently unfamiliar with the literature" when I say that the experiments are too few to permit "definite conclusions to be safely drawn on a subject which concerns the health of millions of people"; but I am not the only occupant of that conspicuous position.

When you wrote in the editorial on "The Open-Air Treatment" (*THE JOURNAL*, Oct. 11, 1913, p. 1378) the words "is wholly in accord with recent experimentation," you evidently were unfamiliar with the literature on the subject. Permit me to add to the list of authorities you so kindly furnished that of Yandell Henderson (*Tr. Fifteenth Internat. Cong. Hygiene and Demography*, vii, 622). And now that your attention has been directed to Henderson, it will be in order for you to dispose of him, or rewrite the phrase "wholly in accord" to correspond to the facts; for "wholly" means "entirely," and Henderson produces facts that are not "wholly in accord."

That I had good grounds for the statement that the experiments are altogether too few to permit definite conclusions to be drawn on a subject which concerns the health of millions of people, and that the subject of ventilation is still open, and that more facts should be observed and presented for consideration before we can draw definite conclusions, allow me to quote from Henderson: "We have really," he writes, "at the present time no adequate scientific explanation for the health-stimulating properties of fresh air and the health-destroying influence of bad ventilation." He summarizes the literature of the subject, including the heat-block conclusion, and asks, "Is this explanation satisfactory?" and adds, "I must confess for me it is not. From the standpoint of hygiene, it is practically proved. From the standpoint of physiology, however, the proof offered by Hill and Flüge merely opens up a new question." In conclusion he says, "The subject needs investigating along new lines rather than a rehearsal of old data." Thus, according to Henderson the conclusions of Flüge furnish no adequate scientific explanation, and I had good grounds for the statement that the subject of ventilation is still open and that more facts should be observed and presented before we can draw definite conclusions.

This is also in accord with Winslow (*N. A. S. Report*, 1911, p. 784) when he states that "extended studies of actual conditions in relation to their effect on physical and mental efficiency can alone furnish a sound basis for such standards as we should like to possess."

The conclusions based on the experiments of Hill and Flüge have furnished a good working hypothesis and have been of value in satisfying the hygienists, but it is very probable that in a few years it will resemble one column, and not a complete edifice, or else perhaps a bird's nest from which the birds have flown.

JOHN B. TODD, M.D., Syracuse, N. Y.

ANSWER.—In reply we may say:

1. At the time the editorial in question was written the *Transactions of the Fifteenth International Congress on Hygiene and Demography* had not been published. There was therefore a reason for being "unfamiliar" with the article in question.

2. Professor Henderson's interesting paper to which our correspondent refers does not contain new experimental data, but is simply a discussion of the physiologic side of ventilation.

3. We would especially call our correspondent's attention to the fact that the article he quotes does not advocate the view that the effects of bad ventilation are due to chemical impurities in the air or to lack of oxygen. On the contrary, starting with the thesis, which "is wholly in accord with recent experimentation," that high temperature, moisture content and air-stagnation are the factors whose influence in ventilation have thus far been demonstrated, Henderson discusses the precise nature of the physiologic reactions to these conditions on the part of the organism. Briefly, his conclusion is that instead of skin conditions being responsible for all the results of bad ventilation, oxygen secretion on the part of the lungs must be taken into consideration. This is somewhat different from Hill's explanation of the physiologic response to conditions of good and bad ventilation, but it in no way touches either the point raised in our editorial of October 11 or our answer to our correspondent November 1. Henderson evidently considers that the effect of cold on the skin "is to stimulate the pulmonary epithelium to secretory activity." He continues: "Taking all of these facts into account, it is logical to conclude that the lungs are normally the seat of a more or less active process of oxygen secretion, and that the effects of warm, moist air on the skin are to inhibit this process in the lungs." Note that "cold" and "warm, moist air" are the factors mentioned.

4. Even if we were to assume that we know all about the factors concerned in ventilation—an assumption by no means justified—we should still have the problem of the way in which these factors act on the human body. This is the real theme of Henderson's article; it is quite true, as he states, that "the proof offered by Hill and Flügge merely opens up a new problem." In scientific investigation a problem "solved" always reveals others in need of solution. The point we attempted to emphasize in our editorial was that there is no evidence that the effect of bad ventilation is due to chemical impurities, but that the observed effects can be largely if not wholly explained by high temperature, high humidity and air-stagnation and that the action of these factors on the human organism may in turn be accounted for on rational physiologic grounds. Our correspondent seems to have misunderstood completely the tenor both of the criticized editorial and of Henderson's article. We recommend a careful rereading of both.

LITERATURE ON PSYCHOLOGY AND PSYCHOTHERAPY

To the Editor:—Please refer me to recent works on philosophic and scientific explorations, investigations and speculations of the occult sciences, the subconscious mind, psychotherapy, dreams, etc.

E. F. WIEDERANDERS, M.D., Estancia, N. Mex.

ANSWER.—Following are some useful works in this broad field:

Tuckey: *Psychotherapeutics*, G. P. Putnam's Sons, 29 West Twenty-Third Street, New York, \$3.

Forel: *Hypnotism, or Suggestion and Psychotherapy*, translated by H. W. Armit, Robman Company, 1123 Broadway, New York.

Sidis: *Psychology of Suggestion, a Research into the Subconscious Nature of Man and Society*, D. Appleton & Co., 436 Fifth Avenue New York.

Schofield: *Force and Mind, or the Mental Factor in Medicine*, Blakiston's, \$2.

Schofield: *The Unconscious Mind*, Funk and Wagnalls, \$2.

Schofield: *Unconscious Therapeutics*, Blakiston's, \$1.50.

Monroe: *Handbook of Suggestive Therapeutics, Applied Hypnotism and Psychic Science*, Mosby Medical Book Company, 2313 Washington Avenue, St. Louis, \$3.

Alexander, H. B.: *Subconscious in the Light of Dream Imagery and Imaginative Expression* (in *Proc. Am. Soc. for Psychical*

Research, III, part 2), American Society for Psychical Research, \$1.00.

Mental Healing. *Queries and Minor Notes*, THE JOURNAL, July 20, 1911, p. 408.

Freud, Sigmund: *Dreams*, New York, Macmillan, \$4.

Jastrow, Joseph: *The Subconscious Mind*, Boston, Houghton, Mifflin & Co.

Dejerine, J., and Gauckler, E.: *Psychoneuroses and Their Treatment by Psychotherapy*, translated by S. E. Jelliffe, Philadelphia, Lippincott, 1913, \$4.

B. C. A.: *My Life as a Dissociated Personality*, Boston, R. G. Badger, \$1.

Masterberg, H.; Ribot, T.; Jastrow, J.; Janet, P.; Hart, B., and Prince, M.: *Subconscious Phenomena*, Boston, R. G. Badger, \$1.20.

Prince, Morton: *Psychotherapeutics*, Boston, R. G. Badger, \$1.50.

Miller, H. Crichton: *Hypnotism and Disease*, Boston, R. G. Badger, \$1.50.

REGULIN

To the Editor:—Will you kindly let me know what Regulín is? Enclosed is literature telling what it is, but there is so much left unsaid that I will be grateful for more information.

F. M. R., Monticello, Iowa.

ANSWER.—Regulin is agar-agar (N. N. R., 1913, p. 20) to which some cascara preparation has been added. The product at one time was described in the Appendix to New and Non-official Remedies as follows:

A mixture of agar-agar in a dry form with extract of cascara sagrada representing 15 per cent. of an aqueous fluidextract of cascara sagrada.

RIMINI-BURNAM TEST FOR FORMALDEHYD IN URINE

To the Editor:—Please describe the Rimini-Burnam test for formaldehyd in the urine. J. W. SHUMAN, M.D., Sioux City, Iowa.

ANSWER.—The test referred to is a modification of the Rimini test by Mr. H. A. B. Dunning, and is thus described by him in the *American Journal of Pharmacy*, October, 1913:

About 2 c.c. of urine specimen, contained in a five-inch test tube, is warmed and two drops of 0.5 per cent. solution of phenylhydrazin hydrochlorid is added, followed by 2 drops of 0.5 per cent. solution of sodium nitroprussid, the mixture being made strongly alkaline with saturated solution of sodium hydroxid. In strengths of from 1:20,000 to 1:50,000 a deep-blue coloration results, changing in a few minutes to green, then yellow, or perhaps, red. In more dilute solutions the blue lasts momentarily only, and is quickly superseded by green. The blue may be made to last longer and become more distinct by adjustment of the quantities of sodium nitroprussid and phenylhydrazin hydrochlorid added, the weaker strengths requiring less nitroprussid and phenylhydrazin. In alkaline solutions phenylhydrazin gives a yellow color; therefore, if there is but a trace of formaldehyd, the depth of blue color is masked and converted into green by mixtures of colors blue and yellow.

The following method may be used to determine the quantity:

To 5 c.c. of specimen contained in a 5-inch test-tube, add 0.1 c.c. of 15 per cent. solution of sodium hydroxid and mix well. Then add 0.1 c.c. phenylhydrazin, base, not hydrochlorid; finally add 0.7 gm. of stick sodium hydroxid and agitate for ten minutes. The strength is estimated colorimetrically by comparing with the standard solutions treated in same manner as specimen, and at the same time. It is important to remember that the several reagents must be added to specimen and standard solutions at the same time; that is, specimen and standard are treated simultaneously. Standard solutions of formaldehyd may be prepared by accurately diluting an assayed specimen to the strength of 1:50,000, 1:100,000, 1:200,000, etc.

PETROLEUM POISONING—CARBON MONOXID POISONING

To the Editor:—1. Please give symptoms and treatment of poisoning by inhaling the fumes of gasoline.

2. Give symptoms and treatment of carbon monoxid poisoning.

E. S. CASTER, M.D., Solomons, Md.

ANSWER.—1. The general symptoms of petroleum (gasoline) poisoning consist in headache, dizziness, accelerated heart-action, labored respiration, collapse, stupor, unconsciousness and, more rarely, convulsions; sometimes there is a rise of temperature. Drowsiness is a prominent symptom. Unconsciousness has come on in from ten to fifteen minutes after the swallowing of less than half an ounce of benzín. In cases of collapse, warm baths with cold affusions are recommended; the usual respiratory and cardiac stimulants are also indicated.

2. A description of the symptoms and treatment of monoxid poisoning would occupy more space than can be given to it. We refer the reader to an article on illuminating-gas poisoning in the *Handbook of Therapy*, page 408. This article also appeared in THE JOURNAL, Feb. 6, 1909, p. 473.