## REVIEW OF REVIEWS

### USE OF BISMUTH IN FRAMBOESIA

"Bismene", an organic compound of Bismuth, in combination with urea, has been used intravenously by Chopra, Gupta and Mullick in the treatment of Framboesia. It was tried in four cases, and after four injections the lesions rapidly cleared. In this respect the compound acted as promptly as the organic arsenicals.

The compound is said to have a low toxicity, "its minimum lethal dose being 500 mgm. per kilo to white mice. It produces no untoward effects in animals or human subjects."

(Chopra, Gupta and Mullick, "New Organic Aromatic Compound of Bismuth Suitable for Intravenous Injection in the Treatment of Framboesia") ("The Indian Medical Gazette", Vol. LXIII, No. 7, p. 361).

### VACCINATION AGAINST TUBERCULOSIS IN ITALY

"The National Children's Bureau of Italy plans to introduce in 10 large cities optional vaccination of new-born infants against tuberculosis. According to the plan proposed, the registrar of vital statistics in each city will send daily to the city's pediatric clinic a list of the births reported for the day. The clinic will then send to each family a circular with a reply card attached, explaining in simple language the arguments in favor of antituberculosis vaccination in cases where the child is exposed to contagion. If the parents agree the child will be given the vaccine and will be kept under the supervision of the clinic as long as this may be considered necessary.

(Child Welfare News Summary, Vol. X, No. 29, U. S. Children's Bureau—from La Pediatria, Naples, Sept. 15, 1928.)

### PEDIATRICS OF ONE CENTURY AGO

Gittings, in the American Journal of Diseases of Children, writes about the practice of pediatrics one hundred years ago. Among the most common causes of death among children of those times, were "infantile decline", "teething", and "water on brain".

Cathartics were the most widely used of all remedies. They were used in large doses, and repeated at frequent intervals.

The following interesting case is reported in the literature of those times:

"Master B., of Bromley, aged 1 year, after two days of constipation was attacked with violent vomiting, fever and abdominal distention, notwithstanding a purging of a watery nature unmixed with feculent matters. Four grains (0.26 Gm.) of scammony and 2 (0.130 Gm.) of mild mercuric chloride were given every four hours with some infusion of senna and syrup of rhubarb. On the next day, the vomiting and watery purging had nearly ceased, so the scammony and other drugs were repeated. On the third day, no feces had appeared, so a cathartic clyster morning and evening was ordered together with 1 grain (0.065 Gm.) of mild mercuric chloride and 4 grains (0.26 Gm.) of jalap, four times a day, in place of the former mixture. On the fourth day, the results had been nil except for a little mucus produced by the clysters, so a new combination was tried four times a day—4 grains (0.26 Gm.) of scammony, 2 grains (0.13 Gm.) of jalap with a mixture of infusion of senna and tincture of jalap, and also the clysters.

"By the fifth day, no feculent material had appeared, although all the medicines had been retained. The symptoms of pyrexia were somewhat augmented; the child felt great disinclination to be moved (which is fairly obvious), and the fulness of the belly was considerable. The dose for the day was 1 drachm (3.75 Gm.) of aloes dissolved in 1 ounce (30 c.c.) of simple syrup, to be given in divided doses every two hours together with the jalap and scammony powders. On the sixth day, all of the syrup having been taken and retained, our little hero had the first feculent motion since the commencement of his illness. The fullness of the abdomen was somewhat diminished, but fever persisted. The aloes and powders, therefore, were carefully continued. On the seventh day, after two copious evacuations, the fever began to fall, so for good measure ½ grain (0.0325 Gm.) of mild mercuric chloride was given four times a day with an aperient mixture (specifications not furnished), and the child gradually became convalescent."

In the treatment of croup, some practitioners of that period "withdrew enough blood to induce syncope, usually from 6 to 8 ounces, and followed this by three or four leeches on the trachea and a full-sized blister on the chest."

Bed-wetting was treated with cantharides internally to the point of slight strangury, cantharides locally in the uretha, and blisters or plasters of Burgundy pitch on the sacrum.

## HOMICIDES IN THE UNITED STATES

The following interesting statistics of "The Homicide Record in American Cities, 1927" taken from an article by Frederick L. Hoffman in Spectator, appeared in the "American Journal of Public Health" for August, 1928:

"Deaths from homicide seem to have reached a stationery condition at one of the highest points in our history. During 1927 the rate in 122 American cities, having an aggregate population of about 35,000,000 was 10.4 per 100,000, which is slightly lower than the 1926 rate of 10.8. In 30 cities for which data can be secured as far back as 1900, the rate has increased steadily with

few fluctuations from 5.1 in 1900 to 11.3 in 1924; since then, however, it has dropped to 10.1 in 1927.

"There were no deaths in 1927 from homicide in Brockton, Malden, Newton and Somerville, Mass., Harrisburg, Pa., Lakewood, O., Lincoln, Neb., Newport, R I., and Passaic, N. J. Low death rates of 1.0 or less were found in Camden and Elizabeth, N. J., and Lowell, Lynn and New Bedford, Mass. The highest murder rates were 69.3 in Memphis, Tenn., 63.0 in Birmingham, Ala., 55.5 in Charlotte, N. C., 54.0 in Jacksonville, Fla., 43.4 in Atlanta, Ga., 40.0 in Miami, Fla., and 39.7 in East St. Louis, Ill. The largest cities of the country with their congested slums and alleged rule of violence and crime had rates which were considerably lower than these southern cities. Boston had the lowest rate, 3.9, New York City 6.1, Philadelphia 8.4, Baltimore 10.3 and Chicago 13.3. Conditions in Chicago seem to be improving, however, for the 1926 rate was 16.7. An improvement is also apparent in Detroit, Mich., where the rate dropped from 25.3 in 1926 to 18.7 in 1927.

"The mortality from homicide in American cities does not compare at all favorably with the rates of foreign countries. In 1926 the rate for England and Wales was 7 per million as against 104 for the American cities. The rate for Italy in 1925 was 44 per million and the corresponding rate for the United States Registration Area was 86. In the same year the Canadian Registration Area, which included all of Canada except the Province of Quebec, had a rate of 14 per million.

"An analysis of the homicides of Jefferson County, Ala., was made for the years 1920–1926. During this time there were 560 deaths of males and 137 of females from homicide. The average age at death of the females was 25.8, for the males it was 31.9 years. Six hundred and eighty-nine of these deaths took place in Birmingham city but 19.1 per cent of the males and 15.0 per cent of the females were non-residents of the city. Seventy-five and seven-tenths per cent of the male deaths and 59.7 per cent of the female deaths were due to firearms while 66.2 per cent of the white persons and 74.4 per cent of the colored were killed in this manner.

"The death penalty is enforced in much too small a proportion of cases and with too long a delay to be effective in preventing homicides. A study of the 10-year period ending with 1926, in 6 states that did not enforce the death penalty and 5 that did, showed the average murder rate in the non-capital-punishment states to be 42 per million and 57 in the states which enforced the penalty. The number of deaths from homicide for each execution varied from about 36 in Pennsylvania and 44 in New York, to 170 in Ohio and 274 in Massachusetts. These statistics prove that the infliction of the death penalty falls on an insignificant fraction of the murderers in these states and that therefore the best purposes of justice would be served by abolishing the death penalty and substituting life imprisonment without opportunity of pardon or commutation of sentence."

## EFFECT OF POSTURE ON THE BLOOD

The following conclusions were arrived at by W. O. Thompson, P. K. Thompson and M. E. Dailey after a study on "The Effect of Posture on the Composition and Volume of the Blood in Man":

"In the standing still position there occurs a net loss of approximately protein-free fluid from the blood. This seems to be due chiefly to an increase in capillary pressure. The loss amounts on the average to about 11 per cent of the total plasma volume, and is probably greatest where the filtration pressure is most increased, namely, in the lower extremities.

"The maximum fluid loss, which occurs in the standing still position in from 20 to 30 minutes, is made up in about the same time in the recumbent position.

"Observations on the mixing time of a plasma volume dye show a marked prolongation of the time required for the concentration to become uniform in the blood all over the body in the standing still position. The same data suggest that the slowing of the circulation in the lower extremities in the standing still position is greater than that in other parts of the body.

"The findings recorded show the importance of a rest period in the horizontal position for making blood volume and other comparative blood studies."

—(*The Journal of Clinical Investigation*, Vol. V, No. 4, p. 573.)

## CLIMATE AND TUBERCULOSIS

"Climate in the Treatment of Tuberculosis" is the title of an article by James Alexander Miller which appeared in the November issue of *The American Review of Tuberculosis.*

The following conclusions are arrived at:

"The similarity of results obtained, both immediately and after the lapse of several years, appears to leave no escape from the conclusion that, at least when there is a similar basis for the selection of the locality for the treatment of cases of pulmonary tuberculosis and when this basis is employed by the same physician, practically identical results may be expected in each locality.

"When, in addition, it is found that the same or even better results may be obtained in New York City and its environment as in any of the more distant health resorts, it appears a reasonable conclusion that climate *per se* is not the determining factor in the success of treatment."

The following remarks are made in the summary:

"1. The regime of regulated rest and exercise, proper food and open-air life, is the fundamental essential in the treatment of tuberculosis. Suitable climatic environment makes this open-air life more easy, enjoyable and beneficial.

"2. When these essentials are assured, a change of climate is of definite value in a considerable number, probably the majority of cases, but with the proper regime many cases will do well in any climate.

"3. Any change of climate involving the fatigue of travel is contraindicated in acute cases with fever or hemorrhage, or in very far advanced and markedly debilitated cases. Absolute bed-rest is the one essential here.

"4. No patient should be sent away in search of climate who cannot afford to stay the reasonably to-be-expected time and to have the necessary food, lodging and care.

"5. Competent medical advice and supervision are essential.

"6. One of the most valuable assets of change is the education of the patient. This may, of course, be obtained in a suitable environment without reference to climate, as in a sanatorium near home.

"7. Selection of a suitable locality is an individual problem for every patient, depending upon his temperament, tastes and individual reaction to environment, as well as the character of his disease. The advising physician should have an appreciation of these as well as knowledge of the particular environment to which the patient is being sent. Contentment and reasonable comfort are essential.

"8. There is no universally ideal climate. For each patient there may well be a most favorable environment if we are wise enough to find it.

"9. There is a reasonable amount of evidence that certain medical types of cases are more favorably influenced by certain conditions of climate, everything else being equal. For example, reasonably cold, dry, variable climate, such as is found in the mountains, for young or vigorous constitutions which will react well. Dry, sunny climates for laryngeal cases and those with marked catarrhal secretions. Equable mild climates at low altitudes for the elderly and those of nervous temperaments, as well as for those with arteriosclerosis, weak hearts or marked tendency to dyspnoea.

"10. Successful selection of climate and environment for cases of tuberculosis requires wide knowledge of human nature, of places and of the disease. This can only be acquired by patience, skill and experience."