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CORRESPONDENCE.

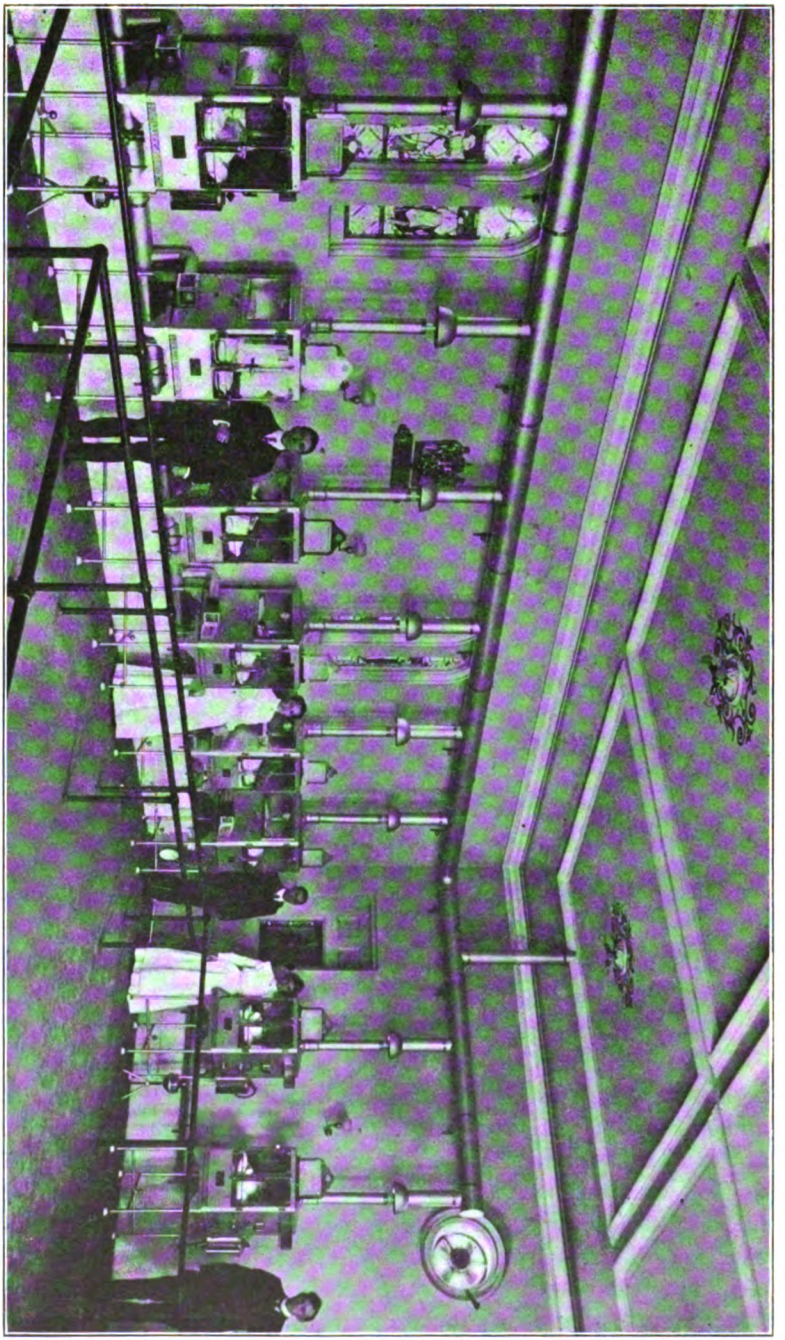
Exhibit of Infant Incubators at the Pan-American Exhibition.

In a prominent position in the Midway, that part of the Pan-American Exposition almost wholly given over to the amusement of those frivolously inclined, is situated the building devoted to infant incubators. The building is of a decidedly picturesque construction. A "barker," as is the case with all the shows of the Midway, promenades on the outside proclaiming in strident tones the especial merits of the incubator exhibit and drawing attention to the fact, that while it is conspicuous for the absence of any unpleasant features, at the same time it is of an eminently instructive and interesting nature and well calculated to provide many hints to mothers and to females generally in the successful rearing of weakly infants.

Whether due to the eloquence of the gentleman in the tall hat, or to that strain of curiosity said to be the characteristic of every woman, it must in truth be allowed that the exhibit is one of, if not the most popular, in all the Midway.

But before entering upon a detailed description of the infant incubators' exhibit, a brief review of the origin and rise of the system will be apposite.

The employment of incubators for the purpose of saving the lives of prematurely born or weakly infants, although much on the increase in all civilized countries of the world, has not as yet become a general factor either in the United States or in Great Britain. France and Germany use such methods to a large extent and, it is claimed, with satisfactory results. One of the most essential measures to preserve the lives of prematurely born or weakly infants is to protect them from change of temperature and cold. In bygone days these children were wrapped in wadding or sheepskin with the wool left on. In Silesia and Westphalia infants were sometimes placed in a jar filled with feathers. In the United States the cot or cradle was placed near the hearth, a custom which en-



Showing a Section of the Incubator Ward. Each incubator contains an infant.

tailed the necessity of watching the fire, by day and by night, so that the temperature should be kept as constant as possible. Hot water bottles inserted in the bedding was a custom also largely resorted to. Devices of this nature, however, could not be relied on; their success was too dependent upon chance.

Weight of child, 2 pounds and 2 ounces.

Dr. Credé, of the University of Leipzig, some sixty years ago became impressed with this unfortunate condition of affairs and resolved to effect an improvement upon those primitive and untrustworthy methods. He designed a sort of box with double metallic sides, the space between these walls to be filled with hot water in order to maintain the wished for temperature. The infant in a cradle, and covered with warm clothing, was placed within the receptacle. In 1878 the first attempt was made to construct an infant incubator on scien-

Feeding an infant through the nose with a gavage spoon.
Weight of child, 2 pounds, 8 ounces.

tific principles. The celebrated Dr. Tarnier was struck when visiting the Jardin d'Acclimatation, at Paris, by the artificial *couveuses* for the rearing of poultry, and the thought entered his mind that a similar apparatus, might be utilized for the rearing of children. He therefore ordered to be made a *couveuse*, sufficiently ventilated and large, to contain one or two infants. Although defective in many respects, notably in the mode of heating, M. Tarnier's innovation was attended with a fair measure of success and many lives were saved by its agency.

According to Dr. James Vorhees, and few will be found to disagree with his conclusions, four problems must be solved in the care and management of young infants. These are: (1) Maintenance of a proper temperature; (2) prevention of exhaustion; (3) the administration of the proper amount and kind of nourishment; (4) the avoidance of infection.

These indications are met as follows: In a pleasant and well-lighted and sunshiny room, a section of which is portrayed in our first illustration, whose walls and floors are of impermeable material, are placed a dozen incubators. These incubators are of metal and glass and therefore can be washed and disinfected with the greatest celerity and are elevated above the floor on steel rods. The infant within is suspended on a couch of woven wire, well padded and covered with linen; he is swaddled after the German fashion. A card is affixed above each incubator, stating its occupants' initials, the date of birth, date of admission to incubator and other details.

The heat of the incubator is regulated by a themostat, the construction of which is so delicate that the slightest variation of temperature suffices to set it in motion. Consequently the heat within the incubator, never varies more than 2° F.

To ventilate the incubator, there is a pipe which is conducted through the wall of the building so that no air but outside air is supplied to the infant within. This pipe delivers the air into a box at the side of the incubator, but before the child is permitted to breathe the air, it is first moistened and washed by being passed through a layer of absorbent material suspended over a utensil containing an antiseptic solution. In the same box is dry wool which takes up any physical impurities. A second pipe conducts the air from this box into bottom and center of the incubator. Thus the air is washed, filtered and warmed before it reaches the infant, and so long

as the lamp or gas burns the temperature and ventilation within the incubator will be automatically maintained.

Every two hours, by day and night, the infants are taken out and supplied with breast-food and coverings cleaned. Our illustration shows a mite which had just been brought to the institution, and the third a babe receiving nourishment by the gavage spoon through the nose.

Adjoining the incubator room is the model nursery, constructed principally of glass, in which is a small pharmacy. Contrivances for sterilizing milk, scales for weighing, miniature tubs for bathing, etc. It need hardly be said that scrupulous cleanliness is observed in every minute detail of the establishment. The claim is put forward that by means of the improved incubating system 85 per cent. of prematurely born and weakly infants are saved.

BASHAM'S MIXTURE.

An old, time-tried tonic in urinary affections, particularly in degenerative conditions of the kidneys, is "Basham's mixture." The virtues of this preparation were extolled in lecture rooms quite half a century ago, and the same is said to-day. In its particular field of usefulness it has well stood the test of time; its composition is:—

℞	Tr. ferri chlor	f. ʒiij
	Acid acet. dil	f. ʒiss
	Syr. simp	f. ℥ss
	Liq. ammon. acetat, q.s. ad	f. ℥iv

M. Sig.—One dessertspoonful every three or four hours. —*Clinical Review*.