

*Oath of the Christian and Godfearing Apothecaries :*

*First.* I swear and promise before God to live and die in the Christian religion.

*Item.* To honour, to esteem and to serve as much as I can, not only the doctors of medicine who instructed me in the knowledge of rules of pharmacie, but also my preceptors and masters with whom I learned my trade.

*Item.* Neither to put an affront upon one of my old doctors and magisters, or upon others, however they may be.

*Item.* To add as much as I can to the glory, honour and majesty of medicine.

*Item.* Not to give any emetic to an acute diseased person without before asking the advice of a doctor of medicine.

*Item.* Not to touch the pudenda of a woman, except in case of urgent necessity, id est, if there a remedy should have to be applied.

*Item.* Not to give poison to any one and never to advise anybody to do so, even not to my worst enemies.

*Item.* Not to give an abortive.

*Item.* To execute minutely the orders of physicians without adding or omitting anything, as far as they are according to the rules of art.

*Item.* To contradict and to avoid like the pest the scandalous and the most destructive manner of practising of charlatans, empirics and alchymists, the high disgrace of the magistrates who allow them.

*At last.* Not to keep poor and old drugs in my shop.

The benediction of the Lord be with me as long as I follow these vows. So be it!—*Deutsche Medic. Wochenschrift.*—*Can. Med. Record.*

COMPARATIVE RESEARCHES ON MILK.—Langaard has recently made some comparative researches on human milk, and that of the mare and of the cow. He corroborates the statements made by Biedart in regard to the differences between the milk, and especially between the casein of the cow and that of humankind. Langaard notices that in koumiss the casein exists in the form of extremely fine flocculi. He finds that mare's milk (*stutenmilch*) is of alkaline reaction when fresh, and retains its alkalinity for two or three days, but

then passes into an acid fermentation. It does not then, however, like cow's milk, assume a gelatinous form, but the casein separates in small flocculi. Dilute acids precipitate the casein immediately, but it is readily soluble in an excess. In the case of cow's milk the casein falls in dense masses, which do not readily redissolve in an excess. Alcohol and tannin precipitate the casein of mare's milk completely. If the casein be precipitated by alcohol and deprived of fat by ether, it may be obtained in the form of a fine, loose, slightly yellow powder, that resembles the casein of human milk in its solubility in water, dissolving much more easily than the casein of cow's milk. The watery solution is slightly opalescent, foams on being shaken, and has a neutral reaction. The dry casein is digested as rapidly as that of the woman. Langaard suggests that it would answer well as a preserved preparation.—*Lancet.*

ORGANIZATION OF THROMBUS.—An interesting memoir on the organization of thrombus has just been published by Dr. Paul Baumgarten, of Königsberg. His observations were made both on arteries and veins, to which two ligatures had been applied. He finds that both in the segment to which the double ligature has been applied, and in the parts of the vessel immediately above and below it, a new cell formation takes place beneath the lining membrane. Nuclei first make their appearance beneath the endothelium by which they are invested; these increase in number, and speedily undergo a differentiation, those nearer the lumen of the tube becoming elongated and concentrically arranged, representing a new muscular coat (though they do not give the usual picric acid reaction), whilst those situated more internally send out processes and form an irregular network. The coagulum or thrombus retreats before the growth of these cells without presenting any indication of cell-proliferation. Near the points where the ligatures are applied new vessels penetrate into the cell-growth, which are derived from the neighbouring connective tissue, and thus gradually a vascular connective-tissue growth is formed. M. Baumgarten attributes the formation of the new growth to the proli-