2. *Total Solids.*—Dry in the oven at 100° the extraction cup filled loosely with asbestos fibre, provided. Cool it, and weigh. Measure 10 c.c. of milk with pipette, run in slowly so it may be completely absorbed. Weigh again. Place in electric oven over night at 85–90° C. Cool, and weigh next morning. The loss is the water. Keep cup in a desiccator until ready for extraction.

3. *Butter Fat.*—Place the dry cup in a Soxhlet, and extract five or six times, using light petroleum spirit. Dry in oven, cool, and weigh again; the loss in weight is the butter fat, the residue is the solids other than fats, viz. salts, proteins, and lactose.

4. *Proteins.*—Determine the total nitrogen by Kjeldahl process; use a little copper sulphate. Weigh in the milk by difference from a weighing bottle. Pour directly into the digestion flask; do not use a funnel. Wash down any drop of milk high up on the stem of the flask with a wash-bottle before adding the acid, etc. Boil very slowly at first. Do not heat strongly until the caking is finished. The fat in the milk causes the digestion to be very slow.

Use the factor 6.37 (and not 6.25) in converting the nitrogen into milk proteins.

5. *Lactose.*—To about 350 c.c. of water in a beaker add 20 grammes (carefully weighed) of milk, mix thoroughly, acidify the fluid with about 2 c.c. of 10 per cent. acetic acid, and stir the acidified mixture continuously until a flocculent precipitate forms. At