obliged to pass before it could penetrate farther and reach the bottom of a flat snow-melter, which was placed above it. Then, after having delivered some part of its heat, the air was forced down again on the outside of the ring-shaped vessel by the help of a mantle, or cap, which surrounded the whole. Here it parted with its last remaining warmth to the outer side of the ring-vessel, and finally escaped, almost entirely cooled, from the lower edge of the mantle.

For the heating was used a Swedish gas-petroleum lamp, known as the "Primus," in which the heat turns the petroleum into gas before it is consumed. By this means it renders the combustion unusually complete. Numerous experiments made by Professor Torup at his laboratory proved that the cooker in ordinary circumstances yielded 90 to 93 per cent. of the heat which the petroleum consumed should, by combustion, theoretically evolve. A more satisfactory result, I think, it would be difficult to obtain. The vessels in this cooker were made of German silver, while the lid, outside cap, etc., were of aluminium. Together with two tin mugs, two tin spoons, and a tin ladle, it weighed exactly 8 pounds 13 ounces, while the lamp, the "Primus," weighed $4\frac{1}{2}$ ounces.

As fuel, my choice this time fell on petroleum ("snow-flake"). Alcohol, which has generally been used before on Arctic expeditions, has several advantages, and, in particular, is easy to burn. One decided drawback to it, however, is the fact that it does not by any means gen-