NOTES ON REGIMENTAL MESSING ARRANGEMENTS.

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(Continued from page 291.)

COOKING.

Regulations for Medical Services of the Army, para. 391, provide for periodical inspection of food and cooking by a medical officer.

According to King's Regulations R.A.F., para. 1173, it is the duty of the C.O. to see that the airmen's meals are properly provided.

A well-trained and keen cook is the solution to most of the messing difficulties. Men selected for cooks should be interested in the work. They should be medically examined before being employed. They may receive extra pay from the cash obtained by the sale of by-products, provided they carry out their duties efficiently (A.C.I. 234 of 1925), 6d. per diem when 7s. per week is received for every 100 men; 3d. per diem when 5s. is received for every 100 men. K.R., R.A.F. 1730 (4).

The dripping used in lieu of margarine is to be charged to the messing and credited to the by-product account. A.C.I. 340 of 1921.

The senior regimental cook should have been trained at the cookery school and be capable of teaching his art to the company cooks. He should be able to maintain discipline in the kitchen, and by constant example and supervision instil the habits of personal cleanliness into his men. Cooks should never be permitted to enter the kitchen before having washed, shaved and carefully cleaned their hands and finger nails. They must be dressed in suitable clean clothing.

The Manual of Military Cooking gives further details of the sergeant cook's duties.

Since food must be clean, a sufficient number of suitable utensils should be supplied, and material to keep them clean, including nail brushes and soap for the men's hands.

Air Publication 112, App. "D" orders the provision of nail brushes, soap and towels for use in every kitchen.

Copper cooking vessels must not be used when any portion of the inside tinning has worn off.

KITCHEN.

The kitchen and cooking apparatus are to be inspected daily by an orderly officer who will visit the dining rooms during the breakfast, dinner and evening meal hours to see that the meals are properly prepared and that there is no cause for complaint. King's Regulations, para. 1485; King's Regulations, R.A.F., para. 1175.

The C.O. will frequently visit the kitchen to see that the food is properly cooked. King's Regulations, R.A.F., para. 1722 (3).
Anti-fly measures include the provision of 10 fly-traps for every 100 men annually, 3 ounces of castor oil and 6 ounces of rosin for every 100 men monthly; 10 fly-papers for every 100 men weekly; and the exhibition of fly-posters. A.C.I. 360 of 1923.

Tanglefoot is prepared by boiling in a glue-pot, nine and a half parts rosin, and five parts of castor oil. The formula for fly-killing solution is: formaldehyde 40 per cent., 2 tablespoonfuls; sugar, 1 dessertspoonful; lime water, filtered, $\frac{1}{2}$ pint; water, to 1 pint.

Stock-pot. The bones are boiled in a net. The pot is to be cleaned out every third day in winter and daily in summer. Instructions for the use and care of the stock-pot which forms part of the Richmond cooking apparatus are given on page 16 of the Manual of Military Cookery and Dietary.

The drawers in cupboards and tables are not to be used as receptacles for dirty clothing, etc. Washing, shaving, and other cleaning kit should be kept in the barrack-room. Smoking should be prohibited during the actual preparation of the food, as cigarette ash and cigarette ends are liable to fall into the material.

For cooking, three pounds of fuel per man per week is allowed for Warren's cooking apparatus, and five pounds per man per week for all other forms of cooking apparatus in barrack cook houses (Allowance Regulations).

ROYAL AIR FORCE.

Hints on fly prevention and destruction are found in Air Force Publication 112, paras. 136 to 140, and App. "J."

THE DINING-ROOMS.

The dining-rooms should be well lighted and warmed. A scale of fuel has recently been authorized.

The tables and utensils should be scrupulously clean for each sitting. Usually six but sometimes eight men are seated at each table. A list of the names of the men dining at a table should be placed on or near it to avoid confusion.

According to the Royal Air Force K.R., enlisted boys are to have a separate mess from the airmen.

Two plates are to be provided for each man, and these are supplied by the officer-in-charge barracks and kept up at the expense of the unit, less the annual 15 per cent of the cost allowed for breakages.

A plentiful supply of hot water, good swabs and round towels should be provided for washing-up purposes, and the provision of a suitable washing-up place, with sinks, drainage boards and plate racks, is essential.

The men chosen for waiters should be medically examined.

They should be trained, given written instructions and ordered to wear suitable clothing.

Food is to be carefully served; the plates must be heated either by placing in an oven or a hot-water bath.
Food should not be issued to tired men; arrangements should be made so that the men have time to rest before and after the meal.

One pint of beer per man may be consumed in the dining-room at dinner. K.R., para. 518.

The meal should be hot when issued and in such quantities as will allow of a second helping. Any food remaining should be re-issued and consumed later instead of being thrown into the refuse tubs.

From funds obtained by the sale of by-products the following extra utensils should be purchased:

<table>
<thead>
<tr>
<th>Each dining table</th>
<th>Army</th>
<th>R.A.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table-cloth</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Water-bottle (carafe)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bread-basket</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mustard-pot</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Salt-cellar</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pepper-box</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

For each serving table:

| Serving ladle              | 1    |
| Serving fork               | 1    |
| Dishes for meat            | 1    |
| Dishes for vegetables      | 1    |
| Dishes for pudding         | 1    |
| Carving knife              | —    |
| Carving fork               | 1    |

The articles may not be bought with saving from the "cash" or "commuted cash" allowances.

APPENDIX 1.

THE TRAVELLING KITCHEN. MARK I.

The travelling kitchen is described in the List of Changes of War Material, No. 16035, dated August 1, 1912; it consists of a limber and body, and is designed to cook for 250 men, and to carry rations, fuel, spare parts and equipment stores.

The body and limber are to be kept horizontal when in use.

On the top of the limber are four boiler compartments, lined with asbestos fibre, each containing a boiler. Behind are carried jam, sugar, salt and tea, in four boxes, beneath which there are two compartments for cook's implements; on the under side of the limber are two other compartments for spare parts. Four frying pans, two on either side, are strapped on to the limber.

The limber may be used separately for distribution of food. There are spare draught poles carried in the loads of an infantry battalion which can be used for this purpose.

The body has seven open compartments, viz., five for boilers and two for fuel.

A fire-box is placed behind and a perch pole in front.

Five boilers are carried on the body, 1 with a tap for hot water, and 4 for food. Each boiler has a capacity of 6½ gallons and is provided with an anti-splash inner-lid and a cover. The fuel boxes hold one cwt. of coal fuel.
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A jointed bearer is carried on the near side of the body. It is used for lifting the boilers from the body into the boiler compartments of the limber. The contents of the boilers being at a high temperature are thus kept hot for a period of four to six hours.

The body is supported by a wood prop under the front, and a steel prop under the rear. It is fitted with removable perch by which it is attached to the limber. The perch is replaced by a No. 9 pole when travelling separately.

Dimensions when limbered up, length overall is 22 feet 8 inches, and the track 5 feet 4 inches.

Weight empty, 17 hundredweights, 1 quarter, 14 pounds; filled 1 24 hundredweights.

Four horses pull the load.

The following alterations have been made to the original design:

Ovens have been placed on either side of the perch socket, and a central oven fitted in the smoke box, directly under the chimney containing oven shelf and two small baking trays. See List of Changes of War Material, No. 21,286, dated November, 1918, by local modifications, and Lists of Changes of War Material, No. 21,287, dated November, 1918, modifications made when passing through the factories.


The use of the travelling kitchen is restricted to brigade training, divisional training and manœuvres. (Equipment Regulations, Part 1, 1923, amendments dated August, 1924, para. 144.)

Each field ambulance is provided with a travelling kitchen.

The following instructions regarding the care and preservation of travelling field kitchens have been published:

Cookers should, as far as possible, be kept under cover, or rough shelter provided.

Boilers containing food or water should be carefully lifted out and in by the pole provided for that purpose, and not by a man standing on the cooker.

Boilers should at all times be carefully handled, and not thrown carelessly about.

The greatest care should also be taken to see that boilers are not put back empty, with a fire in the cooker.

Emery cloth or bath brick, or any cutting substance, is on no account to be used in the cleaning of the boilers. All that is necessary is a thorough cleaning, after each meal, with hot water and soda, and careful drying with a dry dish-cloth.

Once the contents of the boilers have been brought to boiling point,

1 Includes 87 pounds of rations in cases, and 1 hundredweight of fuel. The tonnage for shipment is 8·244 tons.
very little fire is necessary to maintain the heat required. Too much fuel is invariably used, and violent stoking is totally unnecessary.

The greatest care should be taken to fix the prop under the perch and the iron stay under the back part of the cooker before detaching it from the front part. Neglect to do this causes the back part to tip up.

On no account is unauthorized kit or other impedimenta to be carried on the cooker.

Drivers should be careful not to take their cookers over rough ground if it can be possibly avoided.

Cookers should not be used in standing camps, or where it is possible to construct field kitchens.

**APPENDIX 2.**

**FIELD COOKERY.**

(1) The portable stove for field medical units was introduced in August, 1896, to cook for fifty patients. It consists of two ovens of steel plate, two boilers, four baking dishes, a grate for coal fuel. It weighs 90\(\frac{1}{2}\) pounds and can be carried on pack transport. It is described in R.A.M.C. Training 1925, paragraph 114.

(2) Soyer's stove, to cook for sixty men. Designed by the French chef, Soyer, during the Crimean War. It consists of a body with a firepot holding a removable boiler, capacity 12 gallons. The allowance of coal fuel is 1 pound per man per diem. This stove has been included in the field ambulance equipment.

(3) Field kitchen, designed to cook for 105 persons. This trench kitchen is described in paragraph 112, R.A.M.C. Training, 1925. A sloping trench, 9 feet in length with 2-feet turf chimney, over which seven oval, 3-gallon camp kettles are placed in a covering of puddled clay or turf. Wood fuel is required at the rate of 2 pounds per man per diem.

A modification of this form of field kitchen is described in the Army Manual of Sanitation, p. 54, fig. 22.

(4) Aldershot oven. Designed to hold fifty-four 2-pound loaves. Its component parts are: 2 segments, 2 ends, 4 bearing bars, 1 bottom plate, 9 baking dishes, 1 peel. Weight, 374 pounds. Fuel, 300 pounds wood on first day, 150 pounds on second day. Time for baking bread, one to one and a half hours. See page 73, Manual of Military Cooking and Dietary. Will cook dinners of meat and potatoes for about 220 men.

(5) Improvised field kitchen (3rd Army). Designed to cook for 90 men. It is built with rectangular tins filled with earth. There is a corrugated iron firebox, length 5 feet 8 inches, 6 oval camp kettles are fixed in puddled clay. Wood fuel is used.

(6) Improvised field oven. Designed to cook for 60 men. There are 3 improvised ovens built in brickwork—2 below for roasting, and 1 above for warming. Wood or coal fuel may be used.

(7) Improvised field kitchen, for roasting and boiling. Designed to cook for 85 men. There are 5 oval camp kettles placed above 5 ovens.
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made from 5-gallon cresol drums. Built in brickwork. Length 7 feet, height 3 feet. Wood fuel is used.

(8) Modification of No. 3, to burn oil fuel and cook for 60 men. The apparatus, built in brick, having two angle-irons for fuel channels, two 5-gallon drums (one for oil and one for water), and a tray to collect the unburnt fluid. The four oval camp kettles are placed above the firebox; an iron plate is added to cook chupatties. Length 7 feet, height 1 foot 6 inches. Requires about 200 bricks.

APPENDIX 3.

METHOD OF USING PEAS, LENTILS, BEANS OR OTHER PULSES (DHALL) FOR THE PREVENTION OF SCURVY, IN THE ABSENCE OF FRESH VEGETABLES.

(1) The dry seeds must be whole, retaining the original seed-coat, not milled or decorticated.

(2) They must be soaked in water for several hours; the time necessary depends on the temperature, twenty-four hours at 50° F. to 60° F., and twelve hours or less at 90° F.

(3) The water must then be drained away, and the peas, beans, etc., allowed to remain in the moist condition with access of air. They will then germinate and the small rootlet grow out. This germination will take forty-eight hours at 50° F. to 60° F., and twelve to twenty-four hours at 90° F.

(4) The operations described in (2) and (3) could conveniently be done under active service conditions in such manner as the following:—

Soaking.—The peas, beans or other pulses, placed in clean sack, should be steeped in a trough, barrel or other suitable vessel, full of clean water, and should be occasionally stirred. The sack and trough, etc., should be large enough to allow for the swelling of the peas to about three times their original size. In a hot climate six to twelve hours should suffice for this soaking.

Germination.—The peas should be lifted out of the water and spread out to a depth not exceeding two to three inches in a trough or other vessel with sides and bottom porous or well perforated with holes. This is to allow complete access of air. The seeds must be kept in a moist atmosphere. This is done by covering with damp cloth or sacking, which is sprinkled (by hand or automatically) as often as is required to keep the peas or beans thoroughly moist underneath. The germination should reach the stage mentioned in (3) above within twenty-four hours in a hot climate.

All the vessels should be clean.

(5) It is important that the germinated pulses should be cooked and eaten as soon as possible after germination, and should not be allowed to become dry again, as in that case the anti-scorbutic properties, acquired during the process of germination, will again be destroyed. The pulses should not be cooked longer than necessary, and in no case for a longer period than fifteen minutes.

1 See Army Manual of Sanitation, 1926, Appendix X.