



REPORTS

ON

CAPTAIN GRANT'S COOKING APPARATUS.

Presented to the House of Commons by Command of Her Majesty.

I. REPORT ON CAPTAIN GRANT'S COOKING APPARATUS.

PROCEEDINGS of a COMMITTEE ordered to assemble by QUARTERMASTER-GENERAL'S LETTER dated 23rd of June 1862.

President.

Major-General Sir J. MICHEL, K.C.B.

Members.

Doctor LOGAN, M.D., Inspector-General of Hospitals.
Colonel SIMMONS, C.B., Commanding Royal Engineer, Aldershot.

Lieut.-Colonel ROBERTSON, C.B., Commanding Military Train, Aldershot.
Lieut.-Colonel. Hon. H. H. CLIFFORD, V.C., Assistant-Quartermaster-General, Aldershot.

The duty assigned to the Committee was to test and report upon the value for military purposes of:—

- 1st. Captain Grant's boiler cooking waggon.
- 2ndly. Captain Grant's pontoon cooking waggon.
- 3rdly. Mr. Prosser's cooking waggon.
- 4thly. Mr. Warriner's camp kettle.

The Committee met at the War Office on the 3rd of July and 27th of October, and at Aldershot on the 5th and 14th of July and 23rd of August 1862. The last time the cooking in both of Captain Grant's apparatuses was conducted under the immediate supervision of that officer.

Before giving their opinion the Committee desire to remark that, however severe were the trials given to Captain Grant's and Mr. Prosser's apparatus, still each trial, of necessity, fell short in severity of that which would be experienced in actual warfare.

The Secretary of State for War in his letter of the 12th of June last desires the opinion of the Committee on several questions therein stated.

Some of these questions are of a general nature, referring to the general principles upon which the cooking for an army in the field should be conducted, others refer to the special apparatus on which the report of the Committee is desired.

Before entering in detail upon the merits of each particular apparatus, we beg to record our opinion on the general principles above referred to.

4th Question in War Office Letter.—Are not the movements of troops with an army so liable to change that the adoption of one central cooking machine would entail difficulties?

We are of opinion that the movements of troops with an army are so liable to change, that the adoption of one central cooking machine upon which a large body of men would be dependent for their food would entail such difficulties as to be totally impracticable.

3rd War Office Question.—Is it feasible that the cooking for the wing of an army or for a large body of men should be performed in one place by one machine?

And, therefore, that it is not feasible that the cooking of an army or for any large body of men should be performed in one place by one machine.

2nd War Office Question.—Will its use dispense with camp kettles?

When the varying conditions and positions of a regiment on active service are considered, and the necessity for military purposes that each man should carry his own provisions and the means of cooking them, so as to allow freedom of action, we are of opinion, that a light camp kettle or an improved canteen in which the men can carry their provisions, and which will also serve for cooking when on the move, can never be dispensed with.

[Price One Shilling.]

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REPORTS FROM TRAINED COOKS.

Aldershot, 26th November 1862.

I wish to give you my opinion of Grant's stove, as to its fitness for the service.

1st. As to fuel, for that is the principal object, it will consume more than the steel boiler by half; it is also very difficult to make the boiler nearest the chimney boil, as the fireplace is constructed to allow the flame past the second boiler, and the constant shifting of the boilers wears out the bottoms; the consequence is it takes a large sum to keep them in repair.

2nd. It is very destructive to clothes, especially boots, as the men have to stand on the plates to change the boilers.

3rd. While the boilers are being shifted the soot and smoke soon fills the cookhouse, which makes it very disagreeable for the cooks.

T. BIRLEY, L-Serjeant,
2nd Bat., 1st Royal Regt

South Camp, Aldershot, 26th November 1862.

I wish to forward you my opinion on Grant's stove, as to its fitness for the service.

1st. As to the fuel, which is the principal object, it will consume more coal than the steel boiler by half; it is very difficult to make the boiler near the chimney boil, as the fireplace is not made to admit of the flames to pass the second boiler; the constant changing of the boilers soon wears out the bottom, the consequence is it takes a large amount to keep them in repair.

The boilers near the fire will boil in three-quarters of an hour, and that one near the chimney would take three hours, unless a very large fire is kept up.

I have, &c.,
JAMES COODY,

Serjeant 1st Bat. 5th Fusiliers,
Superintending Cooking.

Dover Castle, 19th January 1863.

I REG to state for your information, that the apparatus at this station, viz., Grant's hot plate, with the oven attached to it, consumes about $1\frac{3}{4}$ lb. coals per man in consequence of the oven being so far apart from the fire; there are two of those here, one at Dover Castle and one at the Western Heights, both having the same fault, and I also think that one cookhouse here could be done away with entirely, as there are two within a few yards of each other. I should desire you to visit the station at your earliest convenience, so that you could give your decision, and steps taken to make the alteration.

I remain, &c.,
WM. TAPP,
Corp. 2d Bde. R.A.

84th Regiment, Shorncliffe,
2nd September 1862.

I HAVE the honour to lay before you the following report upon the new system of cooking, which I have been superintending in the regiment under your command for the last six weeks.

1st, the means of cooking are, Captain Grant's stove with oven attached at the bottom of chimney, which is heated by the same fire as the stove.

2nd, a joint of beef about 9 or 10 lbs. weight will take $3\frac{3}{4}$ hours to cook, with a loss of about 35 per cent.

3rd, by constructing a fireplace under the oven it would cause sufficient heat to bake potatoes and larger joints of meat in less time, loss and consumption of coals.

4th, one mess of meat from each company is baked daily, with the potatoes steamed.

5th, the pans and the stoves are not large enough to make soup for three messes with safety.

6th, the loss in boiled meat is from 15 to 25 per cent. The soup gives satisfaction to the men.

7th, I have been conducting the regimental cooking with the assistance of one man per company as constant cook, and one assistant cook, upon the same principle as that I acquired during the course of instruction I went through at Aldershot, and have to report that I conceive the new system of cooking to answer well, and the progress the cooks have made to be satisfactory.

8th, the number of rations cooked daily has been from 630 to 640, with about 600 lbs. of coals daily.

JOHN FITZGERALD,
Serjeant 84th Regiment.

Woolwich, 3rd September 1862.
 HAVING now gained an insight into the working of the various cook houses of the depôt brigade, I beg respectfully to make the following report:—

No. 1 cook house, right wing, Captain Grant's apparatus consists of one oven and 12 boilers and steamers.

This apparatus I consider is totally unfitted for the requirements of this wing, not more than 120 men's rations (contained in 10 dishes) can be baked, the remaining dinners of the wing being cooked in a very unsatisfactory manner, neither boiled nor baked, as the meat has to be packed on two shelves, one above the other, the gravy from the upper portion necessarily running on the lower; the meat is put into the oven at 9 a.m., it steams and sweats till 11 a.m., and then begins to roast, and when done there is not the slightest flavour in it. There being no stewpans to this apparatus, there is no other method of cooking the dinners for this wing, and the various messes prefer sending their meat into the town for baking, at an expense of 3d. for each dish, an expense which, falling daily, greatly impoverishes the men's messes.

This apparatus is better suited for infantry regiments, who invariably have soup for dinner; but I find that soup is not required here more than once a week.

There is every facility for boiling vegetables, puddings, &c.

The quantity of coals consumed daily averages six bushels, exceeding the quantity used in most other of the cook houses under my superintendence.

Two of the hot plate holes in which the boilers are fitted are too large for the boilers, which consequently lose a great deal of heat.

I am, &c.,
 ISAAC LAMBERT, Serjeant,
 Superintending Cooking Depôt Brigade, R.A.

MONTHLY SUMMARY of Consumption of Coals, with Observations upon the Cooking Apparatus used for the Depôt Brigade, R.A., at Woolwich, from 2nd to 29th August 1862.

Cooking Apparatus.	Date.		No. of Men cooked for.	Total quantity of Coals issued for cooking.	Average quantity of Coals used for Breakfast, and to heat the Oven for Dinner, with time for heating.		Daily average No. of		REMARKS.
	From	To			Coals. lbs.	Time. Hours.	Men.	lbs. of Coals.	
No. 1. Capt. Grant's Oven and Boiler -	1862. August. 2	29	10,409	10,080	180	3	371	360	2 hot plate holes for boilers too large, which cause an escapement of heat.

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