No. 3.

Proximate Analysis.			Pemmican.		Remarks.	
			Plain.	Sweet.	100001 25	
Water driven off at 110° C. Albumenoïds Fats Sugar Ash or Mineral Matter.		Per Cent 6.75 35.09 56.42 1.74	Per Cent. 6:73 35:37 52:09 4:12 1:69	1st. It was impossible to separate the lean from the fat in the popular way, but an absolute chemical separation gave in 100 parts of Pemmican—		
Tot	tal	••	100.00	100.00	Analysis. Plain. Sweet:	
~ •. •	Magnesia		0·060 1·849 ·107	·183 1·015 ·102	Dry Lean or Albumenoids 35.09 35.37 Dry Fats 56.42 52.09 Total 91.51 87.46	
Composition of Ash or Mineral Matters.					or The DryPemmican contains—	
Total Ash		••	1.74	1.69	Lean or Albumenoïds 37·64 37·92 Fats 60·50 55·85 Mineral Matters 1·86 1·81	
Potash		•••	·662 ·656	·633 ·450	Total 100·00 95·58	
Lime		••	·072 ·107 ·022 ·005	·055 ·102 ·017 ·050	2nd. The proportion of these matters in the various "joints" of beef do not appear to have been determined, but the elaborate experiments of Messrs. Lawes and Gilbert	
Peroxide of Iron . Sulphuric Acid . Silica		••	·037 ·055	-036	upon the whole carcass, exclusive of bone and offal, give the following numbers— Lean or Albumenoids	
То	tal	• •	1.616	1.343	Fats	
Composition of 1 lb. of Pemmican in English Weights.					Total 100·0	
Water	: : :		Oz. Grs. 1 35 5 269 9 12 0 122 16 000	Oz. Grs. 1 34 5 288 8 146 0 288 0 118 16 000	Different experimenters vary in regard to the proportion of mineral matters, Playfair and Brockman giving it as high as 48 per cent. 3rd. Both samples are free from any evidence of decay or putrefaction; I see no reason to conclude that they are not of good quality, though I am not aware that it has been authoritatively declared what the composition of good Pemmican should be.	

E. FRANKLAND,

Royal College of Chemistry, South Kensington Museum, March 3rd, 1877.