

restored, and this necessitates the unproductive use of a certain quantity of nitrogenous matter. It is a sort of **life tax** which has to be paid in order that the animal may be kept in health and strength to perform some useful duty.

192. In order that some idea may be formed of the extent to which the elements of food are used for the maintenance of the body in health, independent of any production of flesh, we will take the case of a cow in milk, which received a known quantity of food during twenty-four hours and (assuming, as may fairly be done, that she remained the same weight at the end of the day as at the beginning) disposed of it in the following manner. The food given consisted of 120 lbs. of water, 30 lbs. of potatoes, and 15 lbs. of grass. (*Bous-singault.*)

	COMPOSITION OF THE FOOD.	COMPOSITION OF THE MILK.	COMPOSITION OF THE DUNG.	PASSED THROUGH THE LUNGS, KIDNEYS, AND SKIN.
	lbs.	lbs.	lbs.	lbs.
Water,	143·92	14·78	48·83	80·31
Carbon,	9·62	1·25	3·42	4·95
Hydrogen,	1·18	·20	·42	·56
Oxygen,	8·06	·64	3·01	4·41
Nitrogen,	·38	·09	·18	·11
Ash,	1·84	·11	·96	·77
	165·	17·07	56·82	91·11

In this case we have—

17 lbs. utilized as milk.

57 lbs. indigestible matter.

91 lbs. the waste of the body.

165 lbs. weight of food given.

193. The food which is necessary for **supplying the waste of the body** is variable, because the cir-