

making the same mistake when referring to this entozoon.

For myself, permit me to state that I was some fifteen or twenty years ago misled by the circumstance that M. Bohe-Moreau discovered corresponding nematodes in the heart of a wolf; and as the worms from the recognised progenitor of the dog were afterwards considered to be identical with the *Spiroptera sanguinolenta* of Rudolphi, I naturally concluded that not only they, but also the similar nematodes from the dog, were referable to one and the same species.

At the Liverpool meeting of the British Association in 1870, I partly corrected this error by disputing their identity; and, without proposing a new and distinctive title for the worm, I concluded that we had here to deal with a new and entirely distinct species.

On looking into the literature of the subject, I find that this distinction has already been recognised abroad, and that the true name of the hæmatozoon from the dog is *Filaria immitis*—a name not inaptly chosen, since the Latin specific term expresses, metaphorically, the fact that the action of the worm upon its host is essentially "cruel." To my class at the Royal Veterinary College I have described this parasite as "the cruel threadworm," and in my collection there may be seen two hearts of dogs filled with these entozoa, one of which (as elsewhere acknowledged), was received from China and the other from Japan.

Speaking of the young, so admirably described by Mr. Welch in your pages, Krabbe says that they are produced viviparously, and carried along in the circulation; but it is as yet an open question whether the nematode hæmatozoa found by Grube and Delafond are to be referred to this species. My impression is that the *Filaria papillosa hæmatica* is a distinct form, and I think that it should be at least provisionally recognised as such.

Mr. Welch has done good service by the publication of his paper. By an examination of my own specimens I have been enabled to confirm many of the interesting particulars he has recorded. In regard, however, to the general question, I will only add that Dr. Lewis's discovery adds another link to the chain of evidence required to interpret the facts of nematode development within the blood of animals. Not alone in the dog, horse, and ass do these parasites occasion mischief, but in the sheep a blood-strangle is the cause of a little-known epizootic. In various wild animals I have several times encountered similar hæmatozoa; and the fact, therefore, of their occurrence in man is in perfect

harmony with the phenomena of parasitism seen in the lower vertebrates.

It is not improbable that the filariform worms which I found in my patient suffering from Bilharzia may have come from the blood, but I considered them at the time as strictly renal or urinary parasites. So far as I am aware, the honour of discovering nematode hæmatozoa in the human body belongs exclusively to Dr. Lewis, but trematode hæmatozoa have long been known to helminthologists both in mankind and animals.

I am, Sir, yours truly,

T. SPENCER COBBOLD, M.D., F.R.S.

Royal Veterinary College, March 11th, 1873.

ANALYSIS OF THE COMPOSITION OF RABBITS.

To the Editor of THE LANCET.

SIR,—At the request of several subscribers to THE LANCET I have endeavoured to supply, to the best of my ability, the want you lately indicated with regard to the analysis of the composition of rabbits. To this end I purchased last week, for 3s. 6d., three Ostend rabbits weighing 1 lb. 7 oz. 139 grs., 1 lb. 9 oz. 349 grs., and 1 lb. 12 oz. 266 grs. (avoirdupois) respectively.

The first thing to do was to snip off the ends of the tibiae and metatarsal bones, which, as sold, are covered with fur, but carry no practical amount of flesh; the eyes were also extracted, being very seldom eaten. These portions of bone, fur, skin, and eyes are, therefore, a complete loss, and weigh, as will be seen, more than three-quarters of an ounce per rabbit. The flesh was then carefully dissected from the bones and cartilages, and comprised muscular flesh, including a small quantity of adipose tissue, liver, and heart, the kidneys and surrounding fat being removed previous to shipment. The difficulty of analysing the edible portion of rabbits quite accounts for it having been generally avoided. The filtration of the watery and alcoholic extracts and albumin was so slow as to necessitate the use of ice for the maintenance of the process at a temperature below 40° F., otherwise decomposition would inevitably have set in. The gelatin also required no less than ninety-six hours' continuous boiling, and considerable pressure must be used to eliminate both the extracts, the albumin, and the gelatin from the fibrin or syntonin. The result of the analyses is as follows:—

	Rabbit No. 1.	No. 2.	No. 3.	Average.	Percentage.
	Grains.	Grains.	Grains.	Grains.	Grains.
Water	5982	6623	7315	6640	= 73·17
Fibrin or syntonin	1143	1247	1393	1261	= 13·90
Gelatin	302	335	350	329	= 3·63
Fat	240	272	345	286	= 3·15
Albumin	276	305	340	307	= 3·38
Alcoholic extract, including salts	106	119	135	120	= 1·32
Watery extract, including salts	102	108	126	112	= 1·23
Calcium phosphates	16	19	25	20	= ·22
Edible portion	8167	9028	10029	9075	100·00
Additional gelatin from stewing bones	215	232	251	233	= 2·06
Bones &c. dissected out and stewed	1501	1674	1854	2027	{ 17·88
Shank-bones, fur, and eyes, thrown away	318	352	382		
	10201	11286	12516	11335	

This shows that Ostend rabbits contain of edible matter 80·06 per cent., which resembles veal more than any butcher's-meat in its composition, by producing a larger proportional quantity of albumin and gelatin than syntonin. The extracts are identical with the ordinary "extractum carnis Liebig," and although there is a great deficiency of fat, that seems to be the fault of the exporter in taking out the kidneys and their surroundings. English rabbits contain a fairly moderate amount of fat, especially those that are more or less fed. Trusting these analyses may be of some use,

I am, Sir, faithfully yours,

H. C. BARTLETT,

Gray's-inn, March 21st, 1873,

Analytical Chemist.

THE NAVAL HOSPITALS.

To the Editor of THE LANCET.

SIR,—I have read in THE LANCET of last Saturday a rather flattering allusion to my professional services in the Royal Navy. I regret, however, that it is coupled with remarks of a severe nature to a brother officer, who has obtained his rank by long and faithful service where appointed to serve.

All who know Dr. Minter feel that his personal qualities have enabled him to maintain a position that has done credit to the naval medical service, and no one can doubt that the same characteristics will avail him much in the