

THREADWORMS

Infecting the Gullet of Sheep and Cattle Caused by Swallowing Insects

Sheep and cattle very frequently have threadworms in the gullet. These worms are seen in the lining of the gullet beneath the surface in a rather striking wavy pattern similar to that formed by a snake as it travels over a smooth surface. The worms are slender and threadlike, but as they measure from over an inch to 6 inches in length and raise up the surface of the lining of the gullet to form slender wavy ridges, they are readily located when an infested gullet is slit open and examined. So far as known, the damage occasioned by the presence of these parasites in sheep and cattle is rather slight, though it has been determined that a closely related parasite is intimately associated with the stomach of rats.

It has been shown by investigators and experiments in the Zoological division of the Bureau of Animal Industry that various species of dung beetles are the source from which sheep and cattle become infested with the gullet worm. These dung beetles may be found in almost any manure deposit, except during the winter in cold climates. The beetles usually crawl under the manure deposit, enter from the bottom, and feed on the inner portion of the deposit as long as it remains moist. When the beetles eat the manure they swallow the gullet worm eggs which have passed down the esophagus through the stomach and intestine and out in the manure of the infested sheep or cow. As soon as the manure becomes too dry and hard to work the dung beetles abandon it and crawl into the ground or fly to other and fresher deposits. In about a month the eggs which were eaten by the beetles have hatched and developed into an encysted stage in the body of the beetle, ready to continue their development when the infested beetle is swallowed by a cow or sheep.

The opportunity for sheep and cattle to swallow these beetles comes when the beetles fly from one manure deposit to another. The flight usually ends by the beetles landing on the pasture somewhere near a manure deposit, and as they crawl about through the grass toward the manure, attracted by the odor, they are commonly swallowed by grazing animals. The beetles are no doubt eaten unconsciously as a rule, but as sheep and cattle eat large numbers of insects, since practically every plant is the permanent home or temporary resting place of a number of insects, it is perhaps a matter of more or less indifference to them if they are conscious of the presence of insects in a mouthful of food. This is especially true of cattle, since cattle are noted for eating foreign objects, such as nails, wire, bolts, knives, rubbers, etc.

Among the various kinds of insects picked up by sheep and cattle during the course of a day, dung beetles are likely to be more or less numerous, and of these some are likely to harbor larval stages of the gullet worm, now ready for the next step in development. In the digestive tract of the cow or sheep the beetles undergo partial digestion, releasing the larval worms, which make their way to the gullet and burrow into its lining. Here the worms become mature and in time the female deposits eggs which pass down the gullet and out in the manure to carry on the life cycle.

It was found that under experimental conditions the eggs of the gullet worm would develop to an infective larva in croton bugs as well as in dung beetles; but since croton bugs do not breed in manure and are house dwellers, it is evident that they do not play any part in the natural transmission of the parasite. It is interesting to note, however, that Danish scientists have found a worm, similar to the gullet worm of sheep and cattle which develops as a larva in croton bugs, cockroaches, and mealworms, and which occurs in nature in the gullet, mouth, tongue, and first portion of the stomach of rats. This worm is extremely interesting because the fact already mentioned that its development in the rat is followed by the appearance of cancer of the stomach, a fact of great importance from a scientific and medical standpoint.

While there is now a general recognition of the importance of biting insects as carriers of such diseases as malaria and yellow fever, and of such insects as the fly as carriers of the germs of typhoid fever and other bacterial diseases, the facts cited above show that insects have an importance not yet generally recognized as carriers of parasites. From such parasitic infection man himself is not immune. It has long been known that infestation with a certain kind of tapeworm only occurs as the result of eating the flesh of lice or dogs, and the list of cases of the occurrence of this tapeworm in man, and especially in children, indicates only too well that dogs and lice are swallowed by human beings not altogether rarely. In the case of sheep and cattle the swallowing of insects is practically unavoidable, but man can guard himself against swallowing dog fleas and lice and his rather unpleasant as well as dangerous consequences by observing greater care in his relations with yet animals, particularly by excluding them from his household, which is the only certain way of preventing the scattering of their external parasites in places from which children and even grown persons are liable to swallow them.

BUSY DAYS FOR MAKERS OF LAWS

Important Bills Are Appearing on Calendar.

MAY WORK EVERY EVENING

In Endeavoring to Keep Up House is Likely to Labor Overtime—Capital Punishment, State Police Increase, Civil Service for City Firmen and Other Measures Being Considered.

Harrisburg, Pa., April 10.—Bills of vital importance are now out on the calendars to be voted on by members of the two branches of the legislature in a short time. It is expected that the next ten days will bring forth additional measures of general interest and signs point to every legislator having his hands full until the close of the session. Many anticipate plenty of night work in trying to keep up with the output of the committees.

The general appropriation bill made its appearance last week, but has since been returned to committee for necessary changes. In regard to departmental appropriations a subcommittee is at work looking into various items and as soon as this investigation task is gotten through with the two chairman, Buckman and Woodward, will be ready to whip appropriations into shape.

In addition to the bill to increase the state police force, this week's house calendar contained the Tompkins bill to abolish capital punishment which passed the senate a few weeks ago, as well as the kindred bill giving a jury the power to decide whether the punishment in a first degree case should be death or life imprisonment.

Township Code. The township code is also on the calendar. This is of great concern to the townships of the commonwealth. It codifies into one general law the hundreds of acts that have been passed affecting townships of the two classes. This code was prepared by the legislative reference bureau and the object is to simplify township laws, as was done in the matter of borough laws two years ago. The borough code is proving a great convenience to lawyers and officials of such municipalities and it is believed the general law covering all township acts will likewise be of inestimable benefit to persons interested in townships. Representative Sigfus has introduced the township code.

Catlin's bill giving firemen in first class cities the benefit of civil service went through this week and is now up to the governor for his approval. Another Catlin bill regulating boxing contests has passed the senate and is in the house committee.

The equal suffrage amendment has been reported out of committee with an affirmative recommendation and is now on the calendar.

Health Insurance Here. Considerable attention has been attracted among the members by the bill presented by Representative J. J. Dean, of Lawrence, to establish a system of health insurance in Pennsylvania. It contemplates state participation and was prepared after four years of investigation and study under the direction of the American Association for Labor Legislation co-operating with the American Medical Association and representatives of labor and industry. This bill is being introduced in legislature this year.



POULTRY

A LARGE BUSINESS

The poultry business is supported by many to be a small business—not worth serious thought of our well-to-do farmers. The fact is that we farmers have neglected our poultry shamefully. It is estimated that there are 2,000,000,000 dozens of eggs consumed in the United States, and if the average price per dozen paid were 15 cents we would have a grand total of \$300,000,000. How much of this money are we getting? Are we getting our share or are we letting the others get it? What other branch or side line of farming will pay as much? The above figures are for eggs only. Our fowls that we sell to the markets would equal the above figures. Take our turkeys, geese and ducks and we are safe in saying that the income derived from same would be at least \$500,000,000 per year. We see by the above figures that the poultry business is no small business. No person can give us a correct figure of what our poultry will bring in one year. Many will start in the poultry business this year only to meet disappointments. There are many ups and downs, especially down, in the poultry business. And right here is where the ones who are successful make money. If every one that took up poultry made a success of the venture our markets would soon be glutted.

The successful poultryman of today started in a small way. He could give his time to his small flock and study their wants, thereby soon mastered the business. Never start in the poultry business till you have the poultry houses built in the way they should be built. Always build them so as to admit plenty of fresh air and sunlight. See that no drafts can reach the fowls. Drafts will give the fowls colds and colds will develop into roup and roup will soon put your fowls under the knife. Keep your fowls healthy with plenty of fresh air and exercise and you will have no trouble in getting the desired eggs, provided you are feeding for results.

More young chicks die each year from the ravages of lice than from all other causes put together. Provide a dust bath for your fowls and it will help you to keep down lice. Clean your houses at least twice a week. Disinfect once every day the drinking fountains and you should have little trouble in keeping your fowls in a healthy state.

The man who keeps pure bred fowls will find a certain demand for eggs for hatching, and cockerels will be wanted by many just starting in the poultry business. A good thing to do to sell your surplus stock. Don't try to raise fine poultry and lice at the same time, for it cannot be done. Decide first which it will be, then go ahead.

KEEPING THE YARDS FRESH Where the poultry flock is confined to small yards on farms, the usual plan is to make a very narrow gate for entrance so the fowls will not escape when the attendant enters or departs.

While this arrangement may save a little trouble in that regard, it does not provide any way to get a horse and plow inside fence, to turn over the ground frequently.

If the flock is confined to small ranges the soil will foul quickly, and the best way to sweeten it is by turning over and raising quick growing crops.

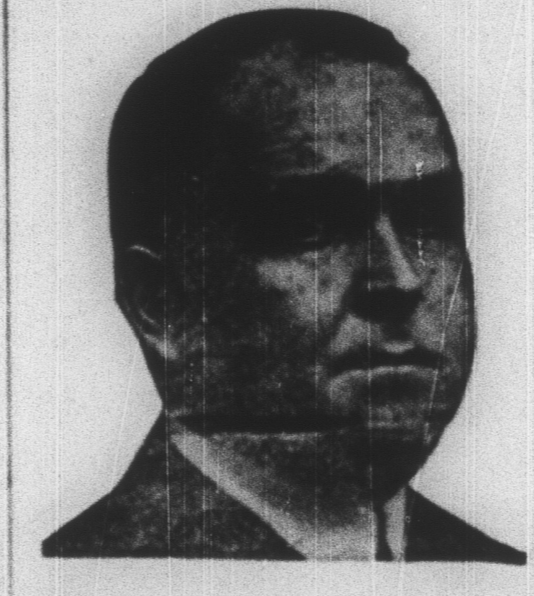
THIS STATE IS LOYAL TO CORE

Legislature Moves to Give Millions For Defense.

BIG WAR FUND SUGGESTED

Beleives Contributing Financially to State Defense and, Thereby, Upholding National Government, Measures For Military Training and Other Matters Pertaining to Crisis Under Way.

Harrisburg, Pa., April 10.—That Pennsylvania will be no laggard in the matter of assisting the national government by the introduction of a bill in the senate and house calling for an appropriation of \$2,000,000 for state defense. Senator Buckman sponsored the measure in the senate and Representative Woodward in the house.



SENATOR CLARENCE J. BUCKMAN Senate Chairman of Appropriation Committee.

It is known that the amount specified in this bill does not represent the exact financial contribution from Pennsylvania. Within a few weeks bills aggregating as high as \$5,000,000 will be presented for the same purpose and probably passed without any difficulty.

The bill as originally drawn gave the governor discretionary power in expending the war fund, but the plan now is to create a board consisting of the governor, auditor general, treasurer and, probably, representative from the two branches of the legislature. They will supervise the fund and take executive charge of the work of placing Pennsylvania in the front as an auxiliary to the government at Washington.

Military Training in Schools. Coincident with the offering of the fund bills, committees were named to investigate the question of military training in the public schools. A bill to bring this about will shortly be presented and there is but little question of its passage.

There are several bills before the legislature on physical training in the schools. The advocates of these measures believe that military training is too revolutionary a step and feel that the same object can be met by physical training. Indications are, however, that at this critical period military training will be given the right of way and a bill calling for it sent to the governor for his approval.

In view of the probable necessity of using the highways of Pennsylvania for the transportation of troops and why vehicles bills for certain road appropriations are being vigorously pushed.

FINANCIAL STATEMENT OF PATTON BOROUGH FOR THE YEAR 1916-1917

	General	Light & Water	Stinking
Grange National Bank Treas. Audit 1916	\$ 391.39	\$ 284.79	\$ 212.90
W. J. Gill Collector	2,413.34	2,048.97	2,170.75
Duplicate 1916			
Fines	21.50		
Licenses	32.50		
Liquor Licenses	846.90		
Bel. Photo (Pole Rent)	1.50		
C. D. & P. (Pole Rent)	19.50		
Foreign Fire Insurance	212.80		
Rents	112.50		
Sewer	15.43		
Payroll Assessment	145.41		
Northern Cambria St. Ry. Co.	70.74		
Miscellaneous	82.21		
Cash Overdrawn	275.95		
TOTAL	\$ 5,650.35	\$ 2,282.77	\$ 2,042.75
Interest on old orders	258.28		
Interest on bonds 1909			\$ 215.00
Interest on bonds 1911			220.00
Interest on bonds 1914			528.75
Police	1,214.00		
Water		766.88	
Streets	796.76		
Sewer	96.26		
Printing	216.00		
Official salaries	175.00		
Board of Health salaries	289.32		
Supplies (City)	42.66		
Collecting Duplicate	251.00		
Transfer to Sinking Fund No. 2	590.00		
Transfer to Sinking Fund No. 4	1,000.00		
Fire Co. loan repaid	83.49		
Miscellaneous		901.61	1,419.97
Cash on hand			
TOTAL	\$ 5,650.35	\$ 2,282.77	\$ 3,042.73

	General	Light & Water	Stinking	Total
Amount of Duplicate	\$ 2,713.00	\$ 2,272.80	\$ 2,970.40	\$ 9,912.30
Collected 2 per cent of	2,823.45	1,696.41	2,290.53	
5 per cent	148.75	89.24	118.96	
Collected at par	287.74	252.64	273.22	
Exonerations	124.66	74.71	59.63	
Land Certificated	28.32	15.80	31.64	
TOTAL	\$ 3,712.90	\$ 2,237.80	\$ 2,970.40	\$ 9,912.30

PAVING ASSESSMENTS UNPAID		
R. A. Lilley		\$233.34
SEWER ACCOUNTS UNPAID		
Bernard Litzinger		20.50
Mary E. Healy		2.00
Mrs. Helen Steffen		82.24
Anthony Kline		21.23
Simon Steffen		1.00
Allice Wharton		23.45
N. K. Huber		1.00
M. & A. H. Burkey		8.44
Susan A. Kelly		12.40
William Reynolds		13.40
P. Clouston		16.00
Amelie G. Kirwin		24.44
Thomas Quinn		21.56
Roch Short		44.28
M. Thomas, Jr.		37.31
Christ Johnson		39.45
R. J. McCormack		35.45
H. Anderson		45.66
Mrs. G. Mough		165.00
James Colson		10.00
Gertrude Smith		10.00
TOTAL		\$716.92

ORDERS OUTSTANDING		
1824—Knock Short		25
1826—T. J. Graham		42.50
1826—Patton H. & P. Co.		10.00
1825—S. W. Worrell		60.00
1825—Patton Clay Mfg. Co.		1.00
1825—Sterling Specialty Co.		20.19
1824—W. J. Donnelly Co.		2.00
1825—W. J. Donnelly Co.		6.22
1825—V. J. Bender		6.00
1824—Edw. Hurwell		8.83
1825—C. C. & C. Co.		1.00
1825—P. H. Kinkead		1.00
1825—C. C. & C. Co.		2.25
1826—S. L. Washland		4.50
1825—Star Printing Co.		1.00
1824—Star Printing Company		6.25
1827—P. H. Kinkead		12.50
1825—H. C. Lamborn		31.50
1825—P. H. Kinkead		12.50
1825—H. C. Lamborn		23.28
1825—Harry Brandt		30.00
1825—J. Harwood		2.44
1825—S. West Electric Co.		23.15
1826—Patton Water Co.		32.36
1827—T. N. Nagle		1.00
1824—A. Karasavak		2,000.00
1827—R. D. Bossert		4.25
1825—N. Kaufmann		2.00
1825—Mellon & Galahan		4.50
1825—John Dundee & Co.		209.48
1825—Patton Clay Mfg. Co.		60.42
1826—Mike Hritz		51.25
1825—Mike Hritz		15.40
1825—Andrew Jacobs		10.00
1827—Wm. Astbury		17.00
1826—V. J. Bender		6.00
1825—Wilbur Jackson		8.00
1825—J. Gill		60.00
1825—L. Blumberg		15.20
1826—H. W. Brandt		25.50
1825—N. C. L. H. & P. Co.		4.55
1825—Binder & Starrett		2.00
1825—Star Printing Company		2.00
1827—W. J. Donnelly Co.		130.25
1826—Patton Clay Mfg. Co.		177.10
1825—H. W. Brandt		60.00
1825—H. W. Brandt		60.00
1825—Alco Paragon		25.25
1825—S. W. Worrell		123.00
1825—D. G. Plumm		24.25
1825—P. Weitz		14.40
1825—Somersditt		66.50
1825—N. C. L. H. & P. Co.		247.00
1826—Patton Fire Co.		294.74
1825—H. W. Brandt		24.40
1825—Wm. Astbury		15.40
1825—Mike Hritz		22.00
1825—Joe Vetchko		25.00
1826—N. C. L. H. & P. Co.		251.19
1825—Wm. Astbury		14.40
1825—V. J. Bender		18.00
1825—N. Kaufmann		22.00
1825—Joe Vetchko		22.00
1825—Wm. Astbury		23.00
1825—Joe Vetchko		23.00
1825—Harry Brandt		60.00
1825—J. Gill		60.00
1825—N. C. L. H. & P. Co.		120.00
1825—Patton Water Co.		105.28
1825—P. Simpson		4.50
1825—Patton Fire Co.		294.74
1825—Mike Hritz		18.75
1825—Joe Vetchko		11.00
1825—Wm. Astbury		1.00
1825—R. L. Washland		3.15
1825—Patton Clay Mfg. Co.		113.00
1825—N. C. L. H. & P. Co.		59.41
1825—State Workmen's Ins. Fund		59.41
TOTAL		\$7,382.88

SUMMARY OF CASH BALANCES		
Light and Water Fund		\$ 901.61
Stinking Fund		1,419.97
		\$2,321.58
General Fund overdrawn		475.86
Sinking Fund No. 3		680.00
Sinking Fund No. 4		500.00
TOTAL CASH ON HAND		\$3,147.73
RESOURCES		
Paying Assessments unpaid		\$ 233.84
Sewer Assessments unpaid		716.32
Municipal Building		12,000.00
Cash on hand		3,148.73
		\$16,098.94
LIABILITIES		
Outstanding Orders		\$7,382.88
1899 Bond Issue		7,000.00
1903 Bond Issue		7,000.00
1911 Bond Issue		12,000.00
1914 Bond Issue		10,000.00
		\$43,382.88
Liabilities in excess of Resources		\$16,098.94

We, the undersigned auditors of Patton Borough, have examined, checked and audited the foregoing statement and find the same to be true and correct to the best of our knowledge and belief.

Respectfully submitted,
 F. L. BROWN,
 PAUL T. BEARER,
 RAY E. BROWN,
 Auditors.

SUBSCRIBE FOR THE PATTON COURIER