

The Antwerp fanciers of Yorkville have arranged for a flying match, with young birds, to take place on the 1st of September. The distance will be about 50 miles. There are to be two prizes; one a gold headed cane, value \$12; 2nd, a gold locket, engraved, value \$8.

Gapes in Chickens and Pheasants.

The disease known as "gapes" has been unusually prevalent this season, especially during the later weeks. It is not confined to the poultry yards, but is destroying large numbers of young pheasants, both tame and wild bred, even those of considerable size.

The cause of the disease is well known—namely the presence of parasitic worms in the windpipe. These increase in size, and apparently destroy life by interfering with the breathing and due oxygenation of the blood.

Of the natural history and development of this injurious and fatal parasite very little is known. Ova are developed in the gape worms, which are in pairs; but of the conditions under which these ova are preserved until they are matured and reappear the following season, we are profoundly ignorant. As the disease is peculiarly local, appearing in one spot whilst adjacent poultry yards and farms are exempt from its attacks, it has been surmised that the ova are retained in the bodies of some terrestrial worms or grubs, or that the animals hatched from these ova pass through their larval state therein; and another theory has also been promulgated that the ova exist in the lice with which chickens are infested, and that the best method of prevention is anointing the birds with mercurial ointment to destroy the lice. The latter theory, however, is not generally accepted, and there are very strong presumptions against it.

The treatment of gapes is not much more satisfactory than the knowledge of its development. One old remedy was the semi-suffocation of the young chicken by placing them in a box with tobacco smoke; but the birds themselves generally succumbed. Some years since I suggested fumigation with turpentine or carbolic acid. A few drops of the latter may be volatilised from a warm brick placed in the box with the chicken. Carefully performed fumigation, especially when carbolic acid is used, is fairly efficacious, as the vapour of this powerful chemical is peculiarly fatal to the lower forms of animal life.

This year I have had to recourse to the very old practice of removing the worms mechanically. Wrapping up the chicken in a handkerchief, to prevent struggling, the mouth is opened, and a loop of thread passed behind the tongue, which is pulled forward, exposing the slit of the larynx, or

opening of the top of the windpipe. Holding in the right hand a stem of foxtail grass, from which the scales (florets) have been stripped, the rough top is pushed down the windpipe, and rapidly twisted between the finger and thumb. On pulling it out it will be seen to be covered with a brown grumous pulp, the result of the destruction of the worms, which are easily destroyed by the slightest touch.

Care must be taken that the grass stem is passed the whole length of the windpipe, as the worms are usually numerous at its lower part, where it divides into the two bronchi, going one to each lung. This is easily managed by measuring the full length of the neck with the grass stem before inserting it in the pipe.

I have recovered birds very heavily *in articulo mortis* by this process, but I need hardly say it is not invariably successful in advanced cases, and, where the patients are numerous, is troublesome and tedious.

Nevertheless, I know of no more efficacious remedy when the disease has once appeared, and can only reiterate the old proverb that "prevention is much better than cure," and suggest the adoption of fresh, untainted ground for the hatching operations of next season.—W. B. TEGETMEIER, in *The Field*.

Brooders vs. Hens.

FRIEND FULLERTON,—You must excuse my not sending this to you for July REVIEW, but press of business prevented. Looking after two hundred varieties of potatoes, and about two hundred and fifty chickens, besides other business, you may judge I am not very idle.

You will see by my heading that I am against the hen, and in favor of the "artificial brooder." My reasons are numerous, but at present will only mention a few of the leading ones why I prefer the "brooder."

First.—Great danger lies in the hen killing a large portion of her chicks before they get free from the shell.

Second.—After they are out of the shell, these that are first hatched will often get out of the nest and perish before they can be found and put back.

Third.—If the hen is cross, when you go to feed the chickens she will dance about and tread on them; by so doing she will kill or cripple them.

Fourth.—Very often you will find that her feathers get matted, and the young chicks get killed by being hung in her feathers.

Fifth.—She generally thinks she has a right to the lion's share of the feed you have prepared for the chicks, and often she will scold them for wanting to eat in your presence and keep them back