

*Sheep prices.*—The flock-masters in England must be in high glee. In the month of August, lambs at Britford fair—Hampshire-downs—sold as high as 53s. = \$12.70 a head, and prices in general were from \$2.50 to \$3.00 a head higher than in '87! Good ewes were worth \$13.75 apiece. Is it not a pity that we cannot have our share in these good prices?

### OUR ENGRAVINGS.

1. English R. A. Society's first prize shorthorn bull, *Mario*. The best shorthorn bull of the season.

2. *Royalty*.—Cleveland-Bay Stallion. The Queen has in the royal stables about twenty pairs of powerful coach-horses of this stamp. I remember one morning about five o'clock seeing the whole stud leave the Mews in the rear of Buckingham Palace for exercise, and a fine sight it was.

3. *Standard*.—Imported Southdown ram. His breeder, Sir William Throckmorton, is the representative of one of the oldest Roman Catholic families in England.

4. *Toulouse geese*.—See p. 188.

*Hay-making.*—Capt. Edmund Campbell, formerly of St. Hilaire, who is now settled at Twyford, near Winchester, England, does not seem satisfied with the English system of making hay. In a letter I received last week, he says: "I have noticed this year, what in my opinion is a fault with our farmers in making their hay when the weather is very wet, that is that they turn it too often and leave it out too long and the consequence is that it gets so thoroughly soaked that it never recovers. I know that in Scotland they do not do this, and they generally manage to save their hay in as good condition as is possible. I wonder if you will agree with me."

Well, I suppose I must say that I disagree with Capt. Campbell *to the end*. I know the West of Scotland pretty well, including Dumbartonshire and Argyllshire, and I must say that I never saw a decent stack of hay there. The fact is, the hay we call in the south of England *meadow-hay* can hardly be said to exist in Scotland. The grass there is, almost invariably, rye-grass and clover, laid down for two or three years, and only part of the first year's ley is made into hay, the manipulation of which is simply turning it over once or, at most, twice, and getting it into cock as soon as possible. If Capt. Campbell will observe, next June, he will see that the same method is pursued by the Hampshire farmers in the treatment of their clover, saint-foin, and clover and rye-grass crops. But the making of *meadow-hay* is quite a different thing. It must be *broken out* perfectly *immediately after mowing*, or else the thick tufts of the bottom-grass can never be separated; frequent turnings—at least four a day—are necessary to preserve the colour; and cocking—first in small *grass-cocks* and then, in gradually increasing in size, *hay-cocks*—is practised to prevent the bleaching effects of the night-dews. In very wet seasons, like that of 1887, the less hay is moved about the better; but, unfortunately, the South of England farmer is not an adaptive character, and the force of routine is so great *chez lui*, that he persists in conducting his haymaking operations invariably in the same way whatever the weather may be.—*Jenner Fust*.

### CORRESPONDENCE.

TO MR. A. R. JENNER FUST.

Dear Sir,—You did me the honour to publish, in the last number of the Journal, my lecture on the physiology of digestion. You also had the goodness to comment on it, or rather to criticise it, by interjections and exclamations. Not trusting to my own interpretation of these expressions, I con-

sulted several of my friends who are as familiar with your language as with mine. They all agreed in saying that it was an emphatic way of telling a person that he did not understand what he was talking about. I suspected as much before I consulted them.

I am excessively obliged to you for having said with so much delicacy a thing as disagreeable to the person who said it as to the person to whom it was said.

I should have wished to explain myself, but upon reflection, I find the disapprobation so peremptorily expressed, that it would be an act of rashness on my part to try to reply; so I submit without a word. At the end of my lecture you have the complaisance to say that you do not understand what is the "black principle" (*principe noir*) in oats, and you do me the honour to ask me to explain myself on the subject.

As I have not, on this point, incurred your formal disapprobation, I will endeavour to dissipate the doubts you have about this matter.

Under the name *principe noir* was formerly designated one of the active principles of oats, which principle gives to this cereal that special, exhilarating, characteristic property which it exerts on the constitution of the horse alone. Of late years, the name of *avenine* has been given to this *black principle*, by Samson, and it is now known by that name.

"*Avenine* resides in the perisperm of the seed from which alcohol removes it by dissolving it, the alcoholic extract of this principle showing itself to be more active than oats; lastly, it can be isolated from the alcoholic extract." (*Samson. from a communication of the Central Society of veterinary medicine of France.*) It is an alkaloid which combines with acids and forms salts. Samson has prepared sulphates, nitrates, and chlorohydrates of it.

Here, then, dear Sir, are a few explanations on the subject. I do not know whether they will be sufficient or not. Should they not suffice, pray have the goodness to let me know, and I will write at once to the author, who enjoys a certain reputation among the savans in France, and who will esteem it a duty and an honour to give you all the information in his power.

Pray receive, Sir,

The expression of the most respectful sentiments of your most humble and most devoted servant,

J. A. COUTURE, Veterinary Surgeon.

(Translated from the French.)

I regret excessively to find that my laconic notes on Dr. Couture's lecture before the meeting of the Dairymen's Association should have so deeply wounded the feelings of the author. I trust he will believe me when I say that I had not the remotest intention of conveying to the minds of the readers of the Journal that Dr. Couture did not understand the subject which he was treating. On the contrary, I selected the lecture in question for publication because it seemed to me to be a very clear and concise exposition of a matter with which every farmer ought to be acquainted. I was requested some time ago by the Director of the Journals to annotate the articles selected for publication, and I have, in consequence, long been in the habit of doing what I am sorry to see has so much annoyed Dr. Couture, viz., when I differ in opinion from the writer of any article, expressing my idea in a short note, or, as Dr. Couture very properly calls it, "interjection."

I thank Dr. Couture for his kind explanation of the phrase "*Principe noir*" or the "*black principle*" from which oats derive their peculiar force. I was, of course, though my knowledge of chemistry is sadly superficial, aware of the existence of *avenine*, (nicotine, thine, &c.) and, in fact, in a paragraph that has been in the printer's hands since the 1st