

(4) A mare sired by a registered standard trotting horse, provided she is the dam of two trotters with records of 2.30, by different sires.

(5) A mare sired by a registered standard trotting horse, provided her first, second, and third dams are each sired by a registered standard trotting horse.

These rules have been adopted by the committee on revision, subject to the approval of the stockholders of the American Trotting Register Association at the annual meeting, to be held April, 1897. In presenting this report the committee say that they believe that the time basis for the standard should be gradually eliminated, and that no animal should be eligible for registry as a breeding animal solely on account of its performance or the performance of its relatives.

For pacers they recommend similar rules, except that 2.25 is the basis for the pacers where 2.30 is named as that for the trotters.

A Fine Pair of Carriage Horses.

Our main plate illustration this month is one of the fine pair of carriage horses which won first in class 38 at the Canadian Spring Horse Show last April, the class being for horses not under 15.2 hands, shown before a brougham, the horses to count 60 per cent., and the brougham and general appointments 40 per cent. This pair is owned by Mr. John Macdonald, Oaklands, Toronto, and thoroughly deserved the place at the head of the six entries which composed the class, their style, manners, and action being of the best. They are shown in the illustration attached to a "skeleton break." The off horse is by Hamilton Jr., and the nigh one by Diplomat. The nigh horse also won as leader in the unicorn class.

Superfecundation.

In a letter to the *Breeder's Gazette*, F. B. Mumford, of the Missouri Agricultural College, comments on the few cases on record in which two ova of the female have been impregnated by different males and at different times, often several weeks or months apart. This peculiarity of conception is known as superfecundation, and is of some interest to stockbreeders.

Examples of superfecundation, in which two ova are fertilized by different males during the same day, or at the most during the same heat, are not rare, says Mr. Mumford. For instance, a

mare may have a horse and a mule colt at the same birth as a result of breeding her to a stallion and jack during the same heat. I have recently had brought to my attention two interesting cases of superfecundation. The sources from which the information came are apparently reliable, and chances for error, so often present in such reports, seem to be reduced to the minimum. The first case is reported by Mr. Eugene Rhodes, a member of the Missouri State Board of Agriculture. This gentleman bred a mare nine years old to a stallion in the month of May. She had apparently conceived all right, and was considered to be safely in foal, but in August following she showed unmistakable signs of being again in heat. Much disappointment was felt by the owner at this condition, but he determined to change his plans, and breed her to a jack in the neighborhood. This plan was carried out, and in January following, about nine months from the time of breeding to the stallion, the mare gave birth to two young—a horse and mule colt. The horse colt was badly shrivelled, but apparently otherwise well formed. The mule colt was perfectly normal, and was, from all appearances, about five months along in foetal development. Both colts were dead at birth. The second case is reported by Mr. F. L. McGinnis, of Texas, a student of our short winter course in agriculture. A mare owned by a Mr. Cammack, of Texas, seemed to have considerable difficulty in conceiving. She was bred regularly through a period of six weeks, and had apparently failed to get in foal. She was then bred several times to a jack, and, apparently failing to conceive, the owner gave up trying to breed her. At about nine months from the time of the first union with the stallion she gave birth to two colts, one a horse and the other a mule colt. The colts were not discovered until several hours after birth, during which time they were exposed to a cold rainstorm. When found both animals were dead, but there were slight evidences that they had been born alive.

Worms.

S. H. D., Toronto: I have a yearling colt which is troubled with worms. What is the proper method of treatment?

ANS.—Finely powdered sulphate of iron—a scruple for a dose—is recommended, mixed with a warm bran mash. Santonin is a favorite worm medicine, and turpentine is also used by some. Remedies are best given after a fast, and followed by physic to carry off the worms.