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three or four times during the day by the groom. Nature prompts the horse when to drink, and when the prompting occurs, nature, in this respect should be satisfied.

We think it a good plan to accustom the horse to always drink before feeding him. By so doing we oftentimes prevent him from bolting his food, and bringing on an attack of indigestion.

All food, before being placed in the trough, should be well sifted, in order that nails or small pieces of stone may be readily detected. Small stones and nails, be it well remembered, very frequently constitute the unclean around which calcareous depositions accumulate, which form the various kinds of callous upon the alimentary canal. Nails and other substances are often taken into the body through the mouth, and finally find their way through the muscular coats of the intestines into the various organs of the body. An anecdote is related of a gentleman who swallowed a penknife, which remained in his body for nine months, at the end of which time he complained of pains in his shoulder, where an abscess formed, pointed, and from it the above mentioned knife was extricated. The following case under our observation: A child, aged three years, swallowed a needle, six months after which an abscess formed on the thigh, and the needle was removed from it.

Ventilation is necessary as a means for the removal of gases rendered impure, and therefore unfit for respiration. A current of air should be admitted through a grate near the ground, and so contrived as not to blow upon the horse. An aperture should be made in the roof, over which a chimney, provided with a weather fender, should be placed, so that the current of foul gases may be continually escaping, and its re-entrance (often carried by gusts of wind), frustrated by the weather fender.

The temperature of a stable should be about 60 degrees F. We shall again, on some future occasion, consider this point. The above, however, together with generous food, exercise and good grooming, constitute the chief hygienic measures necessary to be adopted to keep a horse in health.—*Charles R. Wood, F.R.S., in American Cultivator.*

## HACKNEY AND COACH.

Is it Advisable to breed the Trotter with Them.

Is the slight depression of business which is at present upon us (not very heavily, by the way, if we stop and consider the maximum of trade, and how about every industry is starting up), in search of horse breeder trotter up both hands and exclaims, "the bottom is out," there is no sale for trotters—hackney and coaching horses are in demand and we must get them in; we must serve our trotting bays and fillies, the hackneys and bred mares and fillies, the coaches and coachers and make money out of the business yet. There is a large demand today, for both of these kinds of horses. We can see a profit in raising them, just as we can see one in the production of a large, fine steer. It is a question of the production of a fine animal, at an expense of grass, hay, grain and care.

To begin with, it will be necessary to have the animal to breed from. If hackneys are required, take stallions and mares of this kind—and the same can be said of coaching horses. But the farmer says, "I cannot exchange my trotting mares and fillies for hackney and coaching mares." I will breed them in a coaching stallion, and I will get a large-sized, lofty-stationed, high-stepping colt, and can sell him for a good price." What right has he to assume this? Why, the fact that the coacher has been bred to a type so good that it follows that the foal must be born to the likeness of its sire. This is a fallacy, and is as great as this:

A man has a mare by Gideon; what her dam was he can't say, except that she is a Messenger mare or something of that kind, no particular breeding; as to individuality—simply a common looking, little mare, with long rumps, which are narrow down to a point, small headed and low headed. This is no beauty of style to her, she is simply a daughter of Gideon, a well-bred horse, and really a good sire, with so much of old Messenger's blood in his veins, that he ought to have nicked well with the daughters of Winthrop Messenger's grandsons, and when those sons and daughters were bred in potent lines, he did.

This mare we speak of had a dam whose blood was not particular individuality. Her breeder thought Gideon could supply what the dam lacked. So he did; she lacked temper and he gave it to the foal. The man who owned her thought he could see a bonanza ahead for him, and he bred for it.

Standing in the State of Maine, at one time, was another son of Tom Roffe. He was a handsome horse, well bred, and took of the form of his Morgan breed dam. The owner of the mare, Mr. Gideon, resolves this all over, he sees nearly all blood lines and, of course, a Nelson. The foal arrives, he cares for it in the usual way that ordinary farmers and breeders do, thinking it more of a nuisance than does not feed it, but he never forgets to add a Nelson price. For the sake of this horse, Tom Roffe, Jr., and Gideon, we are going to say that this foal grew into a pretty little horse, which might, by some little training have trotted in 2:30, but never did, and the owner, after he had pinched it in its youth, and frightened buyers away, was forced to sell it for about the same price one would get for a Western scrub, the same for a trotter and got a cob or small hackney. If he should take such a mare and breed for a hackney or coaching horse, he might get one, or a scrub; he would have no choice.

To take trotting bred mares which have a short and unknown side to their breeding, and try and breed a coaching horse from them is hazardous, unless they have the form and type. Then it may be done to a profit. Take, for example, a trotting mare with good size and a coaching horse form, possessing individuality. The question is this: is it as well to cross breeds as it would be to serve her to a noble trotting stallion of large size, solid build, on account of tidal conditions, be rowed shortly after nine o'clock in the morning.

By breeding such a mare as we described, which must possess a type common to such horses as we have mentioned are there not several chances to sell their produce to a profit, assuming they inherit the form of their parents: first, a carriage or driving horse; second, an elegant, well formed, solid horse for coaching purposes; fourth, a slower horse which has inherited speed but not beauty; fifth, a large homely but rugged horse, suitable for business uses. The last condition will be the least profitable, and would be about the only failure, lacking deformity or accident.

Size is an important factor in the broadmare when coaching horses are to be bred, and it is not fair to suppose that large foals will be the result of uniformity from small mares. For these reasons we

would, as a rule, breed trotting bred animals together, looking at their individual merits, and if there were not good enough to breed to one of its kind, then certainly it would not be to cross with some other, unless the chief object were to keep alive the race of mongrels.

As a rule, small, underbred, picket-rumped, cut-hamed, small-waisted, narrow-breasted, low-headed trotting mares cannot be improved much by breeding them to anything but jacks, and then there is a sort of "outrageous nature," as Josh Billings says, "refuses to breed farther."—*Trainer in Spirit of The Hub.*

## "MUD" HORSESHOES.

We doubt if very many persons ever saw mud shoes for horses. They are used on horses in plowing the low and wet lands of the valley north of Sumner, usually every spring, says a Sumner (Wash.) exchange.

The mud shoe consists of a heavy board about eighteen inches wide and from eight to ten inches long, rounding in front. On this board a red-hot shoe of the size worn on the horse's hoof for ironing is intended to be placed until it burns into it to a depth almost sufficient to bury itself. It is necessary that the shoe have a long toe and long larks. A piece of circular band iron to fit over the top part of the hoof is then attached to the board and over the hoof, to hold the mud shoe solidly to the foot. One end of the band is fastened to the board with a screw, which, when tightened holds the board as squarely to the bottom of the hoof as if it had grown there. The horses become accustomed to wearing them, and after a day or two experience no difficulty in working in them. By this means farmers are enabled to do their winter plowing where, without the use of the mud shoes, horses would mire down. Sumner blacksmiths had considerable experience last spring in thus equipping teams for plowing the lowlands.

## ALL ROUND SPORT.

An Adelaide schoolboy, sixteen years of age, has set up a new Australian cricket record, having scored 300 runs in a single innings played last night.

The Oxford Cambridge boat race, which this year is set for Saturday, March 17th, will, on account of tidal conditions, be rowed shortly after nine o'clock in the morning.

FRANCIS ALEXANDER, 219, made at the great stallion race at Rochester, N.Y., in 1881, is thought pretty well off in Austria. Although he is now twenty years old he sold for \$2,500 recently.

The sire of Mrs. Alexander, 2:09, it is said, would have been castrated when a two-year-old, had it not been that the veterinarian who undertook the job, failed on account of the colt being a riding gelding.

BENEDICTINE, a three-year-old colt, owned in Toronto, was entered as a two-year-old last fall at the York Township Fair, at Glen Grove, and won the race. He was protested and has now been disqualified.

KITE tracks are a failure. They produce records but not sheds, so far that the people cannot see the performance so well as they can on the regulation tracks. A result is that the kites are being converted.

GEMMA, formerly owned by Mr. Angus Sinclair, of Rocky Stock Farm, Clatham, Ont., was the star of the Welsh sale at New York last week, and was knocked down for \$5,000. The average for 26 head was \$875.

For the Epsom Derby Matchbox is decidedly easy nine to two, freely on offer, and from present indications there seems

to be more money in the market for the stable companion. Bullington, who at ten to one has been quietly supported recently to win about \$2,000. Ladass, the favorite, is steady in the quotation at nine to four against.

MR. R. DAVIES last week was made happy by another addition to his Thoroughbred family. Buckle dropped a fine foal to Parisian. The little fellow is a chestnut in color like his mother, and being from the union of a well-bred stallion like Parisian, and a daughter of Stonenge and Mary Buckley, he has everything favorable in the way of breeding.

The Paris correspondent of London Sporting Life sends the following item of interest to cyclists: "The 'ideal' bicycle track of the future is to be laid in the Bois de Boulogne by the municipality of Paris. I understand that the bed of the track is to be built of cement, while the surface is to be of compressed cork. Moreover, it will be enclosed with trees, so as to prevent the wind interfering with the runners."

A NUMBER of amendments to the rules of racing were to be considered at the January meeting of the Trotting Union of Great Britain and Ireland. One amendment provides for the abolition of handicaps in favor of class racing. Another suggestion is that the press be approached on the subject of publishing the results of each day's trotting in the same manner as they now report for racing under Jockey Club and National Hunt rules.

In September, 1884, Maxie Cobb was crowned king of stallions when he trotted to a record of 2:13 at Providence. Now the following stallions have records of 2:13 and better: Directum, 2:04; Stamford, 2:07; Kremlin, 2:07; Arion, 2:07; Pat, 2:08; Nelson, 2:09; Allerton, 2:09; Moquette, 2:10; Panicle, 2:10; Lobasco, 2:10; McKinney, 2:11; Delmarh, 2:11; Regal Wilkes, 2:11; Fred Wilkes, 2:11; Truman, 2:12; Astel, 2:12; Charles, 2:12; Dr. Sparks, 2:12; Constantine, 2:12; Favon, 2:12; Eghorne, 2:12; Ellard, 2:12; William Penn, 2:12; Pactolus, 2:12; Car, 2:12; Ponce de Leon, 2:13; Lock, 2:13; Mark Sirus, 2:13; Edgar, 2:13, and Bellini, 2:13.

At the annual meeting of the Canadian Shire Horse Association, held in the offices of the Agriculture and Arts Association, on the 8th inst., the following officers were chosen: President, John Gardhouse; vice-presidents, George Garbutt, Thistleton; J. Y. Ormsby, Danville, Que.; H. N. Minn, Brandon; George Tweedy, Charlottetown; P.E.I.; C. J. L. Buntel, Grenfell; N.W.T.; secretary-treasurer, Henry Ward, director, John W. Smith, Highland; J. G. Wardlaw, Downview; W. N. Crowley, Robert Markers, Tallmore; T. M. Donkin, Riverview; B. Fisher, Bruce; T. Coleman, Torley Green, F. A. deWard, DeWarden Green, Toronto. The secretary-treasurer's report showed that the registrations for 1892 and 1893 were not numerous, only twenty-three stallions and ten mares being registered during the two years.

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