

their inexpressive astonishment, behold, he held in his hand a galvanised iron skewer, such a one as is in ordinary use for trussing and roasting fowls, six inches long, with a loop at the top. It had, of course, been thrown to him amongst the scraps from the kitchen, and no doubt he had "wolfed it." In three or four days after the above operation, the retriever was quite well and in his usual health and spirits.

BUYING A HORSE.

The following hints on examining a horse appear in *The Maryland Farmer*. They contain much good advice to the non-professional dealer, but fail to cover all the defects a horse may possess. But the chances are that the purchaser who gets a horse free from every defect herein enumerated will have a pretty sound animal.

Examine the eyes in the stable, then in the light; if they are in any degree defective, reject.

Examine the teeth to determine the age.

Examine the poll or crown of the head, and the withers, or top of the shoulders, as the former is the seat of poll evil, and the latter that of fistula.

Examine the front feet, and if the frog has fallen, or settled down between the heels of the shoes, and the heels are contracted, reject him, as he, if not already lame, is liable to become so at any moment.

Next observe the knees and ankles of the horse you desire to purchase, and, if cocked, you may be sure that it is the result of the displacement of the internal organs of the foot a consequence of neglect of the form of the foot, and injudicious shoeing.

Examine for interfering, from the ankle to the knees, and if it proves that he cuts the knee, or the leg between the knee and the ankle, or the latter badly, reject.

"Speedy cuts" of the knee and leg are most serious in their effects. Many trotting horses, which would be of great value were it not for this single defect, are by it rendered valueless.

Carefully examine the hoofs for cracks, as jockeys have acquired great skill in concealing cracks in the hoofs. If cracks are observable in any degree, reject. Also both look and feel for ringbones, which are callosities on the bones of the pastern near the foot; if apparent, reject.

Examine the hind feet for the same defects of the foot and ankle that we have named in connection with the front foot. Then proceed to the hock, which is the seat of curb, and both bone and blood spavins.

The former is a bony enlargement of the posterior and lower portion of the hock joint; the second a bony excrescence on the lower, inner, and rather anterior portion of the hock; and the last is a soft enlargement of the synovial membrane on the inner and upper portion of the back. They are either of them sufficient reason for rejecting.

See that the horse stands with the front feet well under him, and observe both the heels of the feet and shoes to see if he "forges" or overreaches; and in case he does, and the toes of the front feet are low, the heels high, and the heels of the front shoes a good thickness, and the toes of the hind feet are of no proper length, reject him; for if he still overreaches with his feet in the condition described, he is incurable. If he props out both from feet, or points them alternately, reject.

In testing the driving qualities, take the reins while on the ground, invite the owner to get in the vehicle first, then drive yourself. Avoid the display or the use of the whip; and if he has not sufficient spirit to exhibit his best speed without it, reject. Should he drive satisfactorily without, it will then be proper to test his amiability and the extent of his training in the use of the whip.

Thoroughly test his walking qualities first, as that gait is more important in the horse of all work than great trotting speed. The value of a horse, safe for all purposes without blinds, is greatly enhanced thereby.

Purchase of the breeder of the horse if practicable; the reasons are obvious.

The Philadelphia and Reading Railroad Company have commenced the use of petroleum gas on their cars.

SHRINKING OF SEASONED TIMBER.

The various kinds of oak, and some other kinds of valuable timber, will shrink more or less every time the surface is dressed off even a small fraction of an inch. Wheelwrights, accustomed to work in oak, are well aware of this fact, and a correct appreciation of it often enables them to turn out work of a superior character, even of ordinary materials, by first blocking out the pieces roughly, then allowing the timber to season, and afterwards working the various parts by degrees, as the seasoning process becomes more and more complete. White oak spoke timber, for example, may be allowed to remain in rough state for half a score of years, under shelter, without becoming seasoned so thoroughly that the timber will not shrink after the spokes have been dressed out.

Carriage-wheels have often been made of the choicest of oak timber after every spoke had been seasoned for several years, and, to the great surprise of the wheelwright, every spoke would work in the joints before the vehicle had run three months. The defect in such instances could not be attributed to inferior timber, nor to perfunctory workmanship, but simply to this one circumstance—that the parts of the wheels were put together before the timber had ceased to shrink.

To prove that the best quality of oak will shrink, after a spoke has been dressed out, let a tenon be made on one end, and be driven immediately into a mortise, after a few days' exposure in a warm workshop the spoke may be withdrawn with little difficulty. The same fact will hold good in the manufacture of woodwork of any kind where oak is employed for tenons. In order to make joints that will never start, the piece on which the tenons are to be made should be dressed over several times, until the shrinking has ceased. Then let the tenons be made. After these have shrunk, while exposed to the drying influences of a warm workshop, the spokes, or other parts, may be driven into their respective places, with the assurance (especially if they are dipped in oil paint previous to driving) that the timber will shrink no more.

Many kinds of farming implements, in the manufacture of which oak and ash are employed, render very unsatisfactory service, simply because the seasoned timber was not allowed to shrink before the tenons were driven into the mortises. In like manner, oak chairs, and other oak furniture, will frequently shrink to such an extent that the pommels, rugs, dowelpins and banisters will all work loose, if the precaution we have described is not observed.—*American Builder*.

EXPERIMENTS ON FLOWERS.

The *Journal de la Société Centrale d'horticulture de France* contains some interesting particulars on the artificial colouring of natural flowers. Those that have a violet hue will gradually change colour and turn to green under the influence of the smoke of a cigar. This is easily seen, for instance, on the petals of *Thlaspi* or shepherd's purse, *Iberis umbellata* or *Hesperis matronalis*. This change is owing to the ammonia contained in tobacco, starting from this circumstance, the Italian professor, L. Gabba, has made a series of experiments on a variety of plants with that alkali in its natural state. His apparatus is a very simple one, merely consisting in a plate into which he pours liquid ammonia, covering it afterwards with a reversed glass funnel. The flower to be tested is inserted into the tube. In this way he has seen violet, blue, and purple turn to bright green, intense carmine red (of the pink) become black, white turn yellow, &c. The most extraordinary results were afforded by variegated flowers. When the latter, immediately after this exposure, are dipped into pure water, they will retain their new colours for several hours, after which they simply return to their former state. Another curious discovery of Professor Gabba's is, that the flowers of aster, or starwort, that are violet and have no smell, acquire a delightful fragrance and turn red under the influence of ammonia. We know that the Japanese, by means of injections which they keep secret, can colour or whiten flowers and obtain wonderful variegation. The Chinese have also secrets of their own, among which one for reducing large trees to a dwarf size. The Garden of Acclimatisation has at this moment an orange tree, a hundred years old, and imported from China, no bigger than a rose tree, its fruit scarcely attains the size of a cherry.