

Thoroughbred Stock.

A writer in the *New York Times* puts the question plainly, in saying, if a farmer is raising cattle for beef and he can add two hundred pounds to the carcass of each by the time it is ready for the shambles, by the use of a Shorthorn bull, it will certainly be profitable to him to pay a good price for such a bull. This is the average result of using thoroughbred bulls on the native cows of the country, as estimated by the best stock-breeders; and this two hundred pounds is a clear gain, for it is produced by no greater consumption of food. If the use of a thoroughbred ram on a flock of ewes increases the weight of the fleece one pound on the average, certainly more than "five in a hundred can make it pay," whether more than five would or not is another question. And so with hogs. The difference between the common herd of the past and the improved breed of the present, is beyond comparison.

Nothing can be more penny-wise than the practice of many of our farmers of breeding from scrub and grade boars. To the farmer who breeds ten

or more sows, a thoroughbred boar is cheaper at \$50 than a grade boar for nothing, even if the hogs are to be fattened. A single dollar on each pig would make up the money, and I am confident that I have seen in many cases a difference of \$5 each, with the same care, between thoroughbred hogs and those that have been bred hap-hazard. On hundreds of farms to-day can be found stock hogs a year old that will not weigh over eighty pounds each, and that are not ten pounds heavier in the spring than they were in December. If offered for sale now they would not bring over five and a-half cents a pound, and they have probably consumed as much grain as the breed of hogs that, at the same age, weigh two hundred pounds, and are worth seven cents a pound.

The man who is carefully breeding pure stock is a public benefactor, and ought to be well paid for what he offers to the public, for it is valuable. Such men should be patronized and encouraged, for the farmers cannot do without them. In the good time coming more attention will be paid to this matter than at present. Not only should this question be discussed in the grange, but the members should co-operate and purchase such animals as will improve their stock.

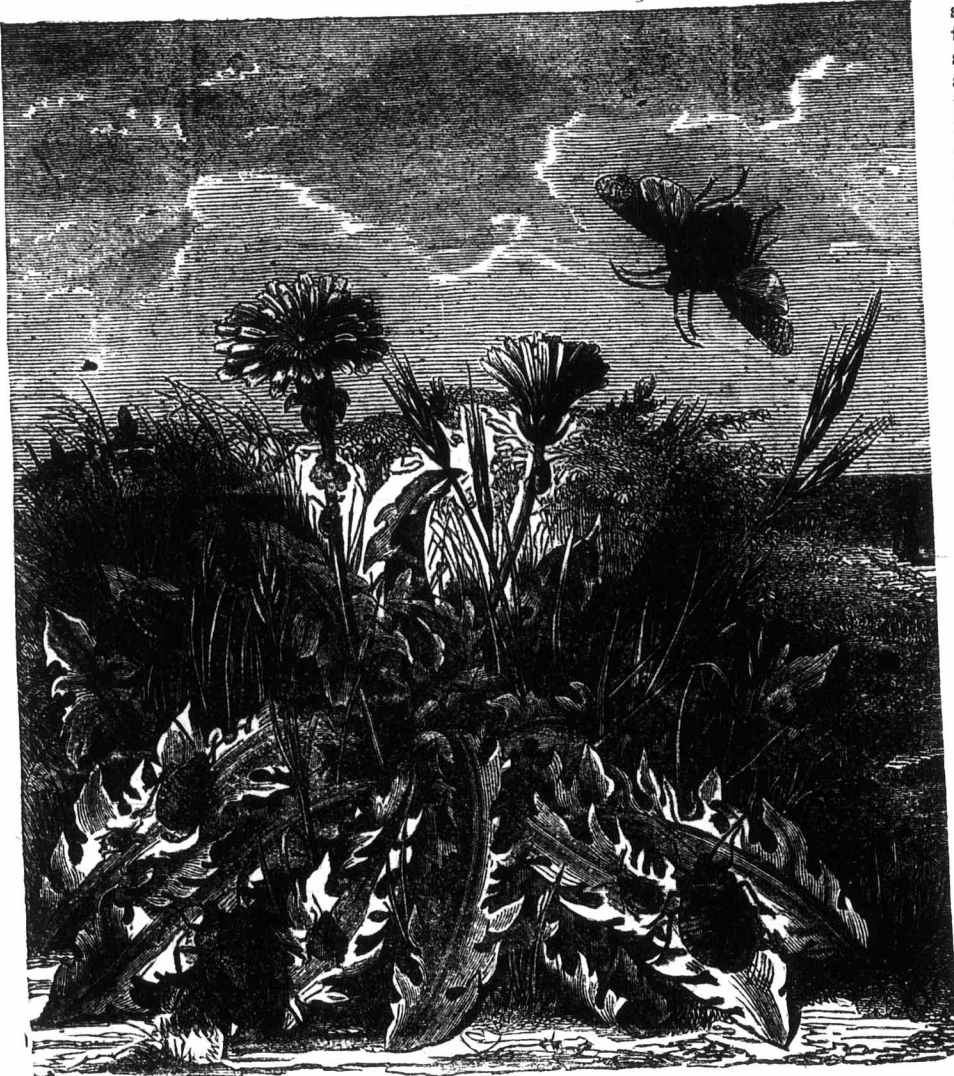
Horses Rearing.

Whenever you perceive a horse's inclination to rear, separate your reins and prepare for him. The instant he is about to rise, slacken one rein and bend or twist his head with the other, keeping the hands low. This bending compels him to move a hind leg, and of necessity brings his fore-feet down. Instantly twist him completely round, three or four times, which will confuse him very much and completely throw him off his guard. The moment you have finished twisting him around, place his head in the direction you wish to proceed, apply the spurs and he will not fail to go forward. If the situation be convenient, press him into a gallop, and apply the spurs and whip two or three times, severely. The horse will not, perhaps, be quite satisfied with the first defeat, but may feel disposed to try again for the mastery. Should this be the case, the process of twisting, etc., should be repeated.—*British Sportsman*.

The Dominion Steamship Company has decided to run a fortnightly line between Liverpool, Halifax and Philadelphia during the coming winter instead of their usual course between Liverpool and Boston.

Hints for Horse-Owners.

If a colt is never allowed to get an advantage, it will never know that it possesses a power that man cannot control; and if made familiar with strange objects, it will not be skittish and nervous. If a horse is made accustomed from his early days to have objects hit him on the heels, back, and hips, he will pay no attention to the giving out of a harness or of a wagon running against him at an unexpected moment. We once saw an aged lady drive a high-spirited horse, attached to a carriage, down a steep hill, with no hold-back straps upon the harness, and she assured us that there was no danger, for her son accustomed his horses to all kinds of usages and sights that commonly drive the animal into a frenzy of fear and excitement. A gun can be fired from the back of a horse, an umbrella held over his head, a buffalo robe thrown over his neck, a railroad engine pass close by, his heels bumped with sticks, and the animal take it all as a natural condition of things, if only taught by careful management that he will not be injured thereby.



The Hemiptera or Bugs.

Mr. Thomas Winnet, a farmer in London Township, brought us a beetle, very much like the bug shown in this illustration. He thought it was damaging his apple trees, as he found it and many others in holes in the bark of the trees. We showed the beetle to Mr. W. Saunders, editor of the *Entomologist*. He said it was the grey cetonina (*cectonia inda*); that it would not perforate the trees, but merely sucked the sap from wounds in the tree caused by woodpeckers, or damages done to the bark, and that it was not an injurious insect.

The insects of the order hemiptera, or half-winged, include all those commonly called bugs, harvest flies, tree hoppers, plant lice, etc. They are sucking insects, having neither mandibles nor maxillae proper, but horny beaks curved along the breast when not in use, containing in grooves a series of delicate, sharp bristles, by which the insects puncture the skins of their victims. They have four wings, of which the upper are generally thick at the base and membranous at the ends, being as it were half elytra and half wings, whence the name of the order. In a few species, the wings are membranous, and some are wingless as the

bedbug. They undergo only a partial transformation, the larva and pupa resembling the adults, except in the absence of wings and in size; in all the stages they live in the same way, and are equally active. One species, the earth bugs (*geocoris*) have the antennae exposed and longer than the head; most are terrestrial, but some live on the surface of the water; many emit a disagreeable odor. The wood bugs, or *pentatoma*, occur mostly in warm countries, where they attain considerable size, and are marked with brilliant colors; they live on the juices of vegetables and sometimes on those of other insects; they exhale a disagreeable odor, and adhere to whatever they touch.

Our illustration shows the *pentatoma grisea*, a family of the wood bugs, which may be seen, De Geer tells us, on the boughs of trees, the young following their parent like chickens after a hen. They are interesting to the entomologist on many accounts; but the gardeners find them by no means attractive. From June into autumn, the fifteen species of *pentatoma* are busy on cabbages and other vegetables, as well as on trees, and

flowers; vines, beans and rosaceous plants fall victims to their fatal punctures in their search after sap. The wren and the chickadee are foes to these insects, and may do the farmer good service; but the chickadees have disappeared from many of our cities, owing to the pugnacity of the sparrows. Gardeners employ other remedies against these pests, tobacco fumigation and the application of whale oil soap being the best.

FULL VS. SCANT FEEDING.—The fact of it is, all farmers have not as yet learned that the only economical way of keeping swine is to keep them thriving as long as they live. They whose policy it is to feed them just enough to keep them along for the first few months of their existence, and let them glean and root and steal for a living, will be likely to become disgusted with swine-keeping; but when the best breeds are kept as they should be, we think there is money and satisfaction in the business.—*American Rural Home*.

Five hundred and twenty-five dollars in cash prizes will be given amongst Canadian exhibitors at the October exhibit of butter and cheese at Philadelphia, by the Dairy-men's Association of Ontario; also 1 gold, 5 silver, and 10 bronze medals, will be awarded by the Canadian Commission, for dairy products, in addition to the awards by the American Centennial Commission.

SEVEN ACRES OF LAND FOR EACH PERSON.—There is commonly at every Social Science Congress one address which stands out most prominently, not always or necessarily on account of its inherent value, though sometimes also for that, but also on account of its novel, or unusually suggestive, or, as it is called, "sensational" character. Such was Dr. Richardson's address at Brighton last year, when that very desirable place of residence, the City of Hygeia, was first introduced to the notice of the British public; such was Mr. Hawksley's address this year at Liverpool. Mr. Hawksley has a gloomy tale to tell of our condition and prospects at the present day, and he tells it without reserve. First of all let us realize these facts and figures:— "The population of England now amounts to 24,000,000 persons, distributed over about 30,000,000 acres of cultivable land. There is, therefore, one person to one and a quarter acres, whereas in most of the other kingdoms of Europe there are about five acres of land to each person; and on the entire surface of the earth, exclusive of the arctic zones, about ten acres of land to each person; or, after a fair deduction for uninhabitable deserts and mountains, probably seven or eight acres of cultivable land to each person.

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