

## GOLDEN SPANGLED HAMBURGHES.

## COLOR OF COCK.

**Comb, Face and Wattles**—Rich bright red.  
**Deaf ear**—Opaque white.  
**Head**—Deep reddish bay.  
**Neck**—Rich deep golden bay, each feather striped down the centre with rich green black, each color well defined, and not clouded.  
**Breast, Underpart of Body and Thighs**—Golden bay, free from mottling, streaking, or lacing, each feather ending with a round, large, rich black moon or spangle, the moons increasing in size in proportion to the size of the feather.  
**Back and Shoulder Coverts**—Rich deep reddish bay, distinctly spangled with rich metallic black, the texture of the feather giving the spangle a starry or rayed appearance.  
**Saddle**—Rich reddish golden bay, each feather striped down the centre with rich metallic green black.  
**Wing Bow**—Rich reddish golden bay, distinctly spangled with black.  
**Bars**—The greater and lesser wing coverts clear reddish golden bay, free from lacing, each feather ending with a large, round, green black spangle, forming two distinct parallel green black bars across the wing.  
**Primaries**—Bay, ending with a black spot.  
**Secondaries**—Rich golden bay, each feather ending with a rich green black spot.  
**Tail**—Black.  
**Sickle Feathers and Tail Coverts**—Rich green black.  
**Legs**—Slatey blue.

## COLOR OF HEN.

**Comb, Face and Wattles**—Rich bright red.  
**Deaf ear**—Opaque white.  
**Head**—Golden bay, distinctly tipped with black.  
**Neck**—Golden bay, each feather distinctly striped down the centre with rich green black, the colors distinct and not clouded.  
**Breast, Underpart of Body, and Thighs**—Clear golden bay, free from mottling or lacing, each feather ending with a distinct, large, round, rich green black moon or spangle, the moons increasing in size in proportion to the size of the feather.  
**Back, Shoulder Coverts and Rump**—Rich clear golden bay, free from mottling or lacing, each feather ending with a distinct large round rich green black spangle.  
**Wing Bow**—Rich clear golden bay, each feather ending with a distinct round rich green black spangle.  
**Bars**—Greater and lesser wing coverts rich clear golden bay, free from lacing, each feather ending with a large round rich green black spangle, forming two distinct parallel green black bars across the wing.  
**Primaries**—Golden bay, each feather ending with a black spangle.  
**Secondaries**—Golden bay, each feather ending with a rich green black half-moon or crescent-shaped spangle, termed by the Lancashire fanciers, "lacing on the top of the wing above the flight."  
**Tail**—Black.  
**Tail Coverts**—Golden bay, free from mottling or lacing, each feather ending with a rich green black spangle.  
**Legs**—Slatey blue.

Hens in a pen to match as nearly as possible in size of markings and depth of color.

## SILVER-SPANGLED HAMBURGHES.

## COLOR OF COCK.

**Comb, Face, and Wattles**—Rich bright red.  
**Deaf ear**—Opaque white.  
**Head**—Silvery white.  
**Neck**—Silvery white, free from yellow tinge, the longest feathers ending with a small black spangle.  
**Breast, Underpart of Body, and Thighs**—Clear silvery white, free from lacing or mottling, each feather ending with a distinct large round rich black moon or spangle, the moons increasing in size in proportion to the size of the feather.  
**Back and Shoulder Coverts**—Pure white, free from yellow tinge, distinctly spangled with black, the texture of the feather giving the spangle a starry or rayed appearance.  
**Saddle**—Silvery white, free from yellow, the largest feathers ending with a small black spangle.  
**Wing Bow**—Pure white, distinctly spangled with black spangles.  
**Bars**—The greater and lesser wing coverts clear silvery white free from lacing, each feather ending in a large green black moon or spangle, forming two distinct parallel black bars across the wing.  
**Primaries**—Pure white, each feather ending with a distinct black spangle.  
**Secondaries**—Pure white, each feather ending in a half-moon shaped green black spot.  
**Tail**—White on the outside, each feather ending in a large black spangle.  
**Sickle Feathers and Tail Coverts**—White, each feather ending with a rich green black spangle.  
**Legs**—Slatey blue.

## COLOR OF HEN.

**Comb, Face and Wattles**—Rich bright red.  
**Deaf ear**—Opaque white.  
**Head**—Silvery white, distinctly spangled with small black spangles.  
**Neck**—Clear silvery white, each feather distinctly striped towards the end with rich black, each color well defined and not clouded.  
**Breast, Underpart of Body, and Thighs**—Clear silvery white, free from lacing or mottling, each feather ending with a distinct large round black moon or spangle, the moons increasing in size in proportion to the size of the feather.  
**Back, Shoulder Coverts, and Rump**—Clear silvery white, free from mottling or lacing, each feather ending with a distinct large round rich green black moon or spangle.  
**Wing Bow**—Clear silvery white, each feather ending with a distinct round rich green black spangle.  
**Bars**—Greater and lesser wing coverts clear silvery white, free from lacing or mottling, each feather ending with a large round green black spangle, forming two distinct parallel black bars across the wing.  
**Primaries**—White, each feather ending with a distinct black spangle.  
**Secondaries**—Clear silvery white, each feather ending with a large half-moon shaped green black spangle, termed by the Lancashire fanciers "lacing on the top of the wing."  
**Tail**—White on the outside, each feather ending with a large round black spangle.  
**Tail Coverts**—Clear silvery white, free from mottling or lacing, each feather ending with a distinct large round green black spangle.

## Legs—Slatey blue.

Hens in pens to match as nearly as possible in size of markings and depth of color, &c.

## POINTS IN SPANGLED HAMBURGH COCKS.

Comb.....	2
Deaf ear.....	2
Color and marking of head, back, back, saddle, and tail.....	3
Breast, underparts of body, and thighs.....	2
Wings and bars.....	2
Symmetry.....	2
Condition.....	2
	15

## POINTS IN SPANGLED HAMBURGH HENS.

Comb.....	2
Deaf ear.....	2
Neck most distinctly and evenly striped.....	1
Remainder of plumage (except tail in Golden) clearness of ground color, evenness and distinctness of spangling, with rich large round spangles in accordance with the foregoing rules.....	4
Bars.....	2
Symmetry.....	2
Condition.....	2
	15

## DISQUALIFICATIONS.

Hen-feathered cocks, crooked backs, wry tails, combs single, or falling over to one side, red deaf ears, birds without distinct bars across the wing. Legs of any other color except blue.

## BLACK HAMBURGHES.

**Comb, Face and Wattles**—Rich bright red, the face perfectly free from white.  
**Deaf ear**—Pure opaque white; round and small, fitting close to the face; not pendulous.  
**Plumage**—Very rich glossy green black.  
**Legs**—Blue or dark leaden blue.

## POINTS IN BLACK HAMBURGHES.

Comb, Head, and face.....	3
Deaf ear.....	2
Plumage.....	4
Shape, correct Hamburg shaped body and limbs.....	4
Condition.....	2
	15

## DISQUALIFICATIONS.

Comb falling over to one side, or so large as to obstruct the sight, red deaf ears, crooked backs, wry tails, or legs of any color except blue or dark leaden blue.

## Entomology.

## Use of Natural History.

A correspondent of the *Scientific American* paid a visit, in 1862, to Col. Pike, of Brooklyn, N. Y., an amateur naturalist. During the visit, the Colonel said: "I am very frequently asked what is the use of this study of natural history. Some of our very intelligent citizens say to me, 'How are you going to make anything out of this? What good does it do to catch butterflies?' Not long ago, I saw one of the wealthiest men in Brooklyn at work on the trees in front of his house. He had them all scraped and whitewashed at an expense of \$80. Said I, 'Mr. Hunt, what are you doing that for?' 'To keep off the worms,' he said. 'That's no use,' I remarked. 'Oh,' said he, 'I think it is.' Well, now, the insect was a *Geometer*, or measuring-worm; the moth that produces these worms, lays its eggs on the ends of the branches, and it is almost impossible to kill the eggs. The strongest northwest winds have no effect upon them; I have seen them in Maine, and it is difficult to crush them with your nail. When they hatch in the spring, the young worm eats off the tender leaves. You can judge what good the scraping of the trunk would do. I went by some months afterward, and Mr. Hunt was in front of his house, looking up at his trees, which had not a leaf on them, and I remarked, 'Your trees are looking finely, Mr. Hunt; the scraping was more profitable than hunting butterflies.'—*Practical Entomologist*.

## The Borer.

A "YOUNG ORCHARDIST" enquires what is the best time of the year to examine trees for "the borer." It is impossible to answer this question briefly, because there are hundreds of different kinds of borers, as different from one another as a horse is from a cow or a deer from a goat. Each has its own peculiar habits, and each is restricted to one certain kind or several kinds of trees. For example, there are two perfectly distinct borers that attack the apple tree, one of which is cylindrical and bores a cylindrical hole about the size of a goose quill, generally close to the

but of the tree, and changes to a long-horned beetle about an inch in length, striped with cinnamon-brown and white (*Saperda divittata*); the other is hammer-headed, and bores a much smaller hole, oval, and about twice as wide as high, anywhere in the trunk, or even in small limbs, three-fourths of an inch in diameter, and changes to a small, flattish, brassy-looking beetle, about half an inch in length, with very short horns (*Chrysobothris femoralis*). The former is two or three years in the larva state, and consequently may be hunted for at any time of the year. The latter is only one year in the larva state, and therefore can only be found in that state in the fall or early in the spring, as in the latitude of St. Louis it becomes a perfect beetle about the latter end of May. Again, the borer of the peach tree (*Oleria exilis*) changes, not to a beetle like the true apple tree borer, but to a moth or "miller," and comes out at irregular seasons all through the summer, so that no fixed time can be set to find him. Lastly, the borer of the locust (*Clytus robinia*) is a long-horned beetle, like the true apple tree borer, and yet is distinct from all the above and is exclusively confined to that tree; for I have recently proved that the insect which bores the hickory, though it has always hitherto been confounded with the locust borer, is as different from that insect as a buffalo from our common horned cattle.

For my own part I do not believe in spending time in hunting for borers. I find it much more economical to prevent the mother beetle from laying her eggs in my apple trees, than to dig them out after they have hatched and done all the mischief. If "Young Orchardist" will take a bar of common soap—the newer and softer the better—and rub it on the trunks of his apple trees about the middle of May, he will find that no borer will lay its eggs there, and of course, "no eggs, no borers." My trees used to be badly bored up, but for the last four or five years I have followed this plan, and since that I have never been troubled by the borer. Dr. Fitch, the State Entomologist of New York, who first discovered this remedy, tried the experiment of soaping a certain number of trees in his orchard and leaving the others unsoaped, and next spring found all the soaped trees unbored and healthy, and all the unsoaped trees full of borers, and some of them killed outright.

I have tried this same plan with the borer of the peach tree, but it seemed to have no effect on that insect. This will not seem strange when we reflect that the apple tree borer, as has been stated above, is as widely distinct in every respect from the peach tree borer, as a hog is from a cow. Now we know that there are many substances which would be extremely offensive to a cow, which a hog would eat with avidity. Benj. D. Walsh.—*Rural World*.

## Canadian Natural History.

**BEAVERS.**—In a paper on the habits of the beaver, read before the American Association for the advancement of science, Mr. L. H. Morgan, of Rochester, said that on the southern shore of Lake Superior, in Marquette County, he found remains of long canals and dams constructed by them for the purpose of transporting their cuttings, consisting of trunks of trees two or three feet long, from the place where the trees had fallen to their lodges. Some of these canals were 300, 400 and 500 feet long. They were generally three feet wide, with an average depth of three feet. In order to maintain a continuous depth of water, they made dams at certain distances, and followed the Chinese plan—to whom the lock was unknown—of drawing their cargo from one level to another.

**LONGEVITY OF THE ROACH.**—In the spring of 1859 a schoolboy friend of mine presented me with a roach about three and a half inches in length, which he had bagged without much injuring its mouth. It was carefully deposited in an aquarium in my office, holding four and a half gallons of water, and containing at the time two very small perch. In the course of time the perch sickened and died. Year after year has passed by, and the youngster who gave it to me has grown to manhood, and the roach is still to be seen wandering to and fro in his glass mansion. During the winter a small piece of meat from a sandwich is his usual meal; in the summer a common fly or daddy-longlegs is a great relish; and at other seasons, perhaps for a week occasionally, he gets nothing but what can be imbibed from his natural element. There are neither weeds nor water-plants of any description in the aquarium, and the water is changed but once a month, and frequently neglected for a longer period. I would add that the roach has not apparently increased in size, but has assumed a more silvery appearance, and the fins are gradually losing their pink tinge, doubtless from old age.—W. Tabor, (Royal Laboratory, Woolwich, June, 10.)—*The Field*.