

This must be evident, that every animal contains within it the whole of its antecedents; nor is it less manifest that certain combinations and intercommunions of blood have the effect of very speedily overpowering the original parentage, unless belonging to some distinct and incongruous species. In the case of animals bred by one who has uniformly adhered to a favourite strain of blood there is great peculiarity. Even without exhibiting incestuous alliances, the pedigrees of such animals, if carefully searched, would show so many *repetitions* of early sires, so much and such intricate complications of affinities, that very express personal resemblances to remote ancestors, so far from exciting surprise, might be confidently expressed. The face of a pedigree, as we have frequently observed, affords no adequate notion of what the pedigree really is—presents, in fact, a very imperfect idea of the frequency of the recurrence of certain ingredients, whether valuable or worthless. Let us give an instance. It shall be the Herd Book pedigree of one of the noblest short-horn sires of the day:—

Mr. Raine's Earl of Derby (12,810).

Got by Gay Lad (12,922),
dam by The Colonel (5428),
gd by Guardian (3947),
ggd by Magnum Bonum (2243),
gggd by Young Rockingham (2547),
ggggd by North Star (464),
gggggd by Denton (198),
ggggggd by Ladron (353),
gggggggd by Henry (301).

The reader who is but a novice in herd book lore can hardly fail to perceive the pedigree of this magnificent bull to be a pedigree of great value; but not many, probably of more advanced students are exactly aware of the amount of Magnum Bonum blood, for instance, which it sets forth, if minutely examined. Let us see. The name of Magnum Bonum occurs once, and only once, in the direct line of Earl of Derby's pedigree, his granddam having been a daughter of that bull. Only one-sixteenth of Earl of Derby is due, through the direct line, to Magnum Bonum. But Earl of Derby's sire, Gay Lad, was a grandson of Magnum Bonum. His dam's sire, The Colonel, was a son of Magnum Bonum. His grand-dam's sire, Guardian, was a son of Magnum Bonum. Earl of Derby is therefore four times descended from Magnum Bonum; and the proportion of Magnum Bonum in the blood of Earl of Derby is three-eighths, or one-eighth short of a half. We are reminded of a still more apposite illustration. The following is the pedigree of Filbert, a young heifer bred by the writer of these lines, and now the property of a gentleman in Staffordshire:

Got by Royal Windsor (18,784),
dam by Lord Belleville (14,804),
gd by Magistrate (10,487),
ggd by The Colonel (5428),
gggd by Paganini (2405),
ggggd by Rob Roy (557),
gggggd by Wellington (678), &c.

Rob Roy (the sixth bull mentioned here) by Wright's Remus, and out of Lady Jane by Comet was the grandsire of Magnum Bonum, and his name occurs *once* on the face of Filbert's pedigree. But Filbert's sire is three times descended from Rob Roy; and Filbert's dam (bred by Mr. Joseph Dent, of Neasham) ten times; so the Filbert has Rob Roy thirteen times in her genealogy. We might multiply illustrations of the sort, for they are very numerous; in the most carefully conducted herds, very numerous. Many of the Warlaby pedigrees, if thoughtfully scrutinized with respect to the present subject will repay the inquisitive student for the time and attention he may bestow upon them. They abound in repetitions, in no sense objectionable of the finest old blood; and disclose, when questioned thus, a richness and wealth of content but little suspected by the generality of readers. Let us take, for instance, and almost at random the pedigree of Royal Bride (H.B. xiv. 684); and let us take it in reference chiefly to the blood of Pilot (496).

Got by Crown Prince (10,087),
dam Bride Elect by Vanguard (10,994),
gd Bianca by Leonard (4210),
ggd Bagatelle by Buckingham (3239),
gggd by Raspberry (4875),
ggggd by Young Matchem (4422),
gggggd by Young Alexander (2977),
ggggggd by Pilot (496),
ggggggga by The Lame Bull (359),
ggggggggd by Eashy (232),
gggggggggd by Sawarrow (636).

The history of Royal Bride's pedigree reveals no close in-breeding; and whilst it shows Mr. Booth to have pursued the principle of general adherence to one strain, it also discovers several instances of the introduction of fresh blood into the Warlaby herd. Yet it is a curious fact, that although the name of Pilot occurs but *once* in the direct line of this pedigree, Royal Bride is *forty-one* times descended from that bull; twenty-one times through her sire Crown Prince, and twenty times through her dam Bride Elect. The reader can see, from the foregoing examples, without having recourse to the hypothesis of accidental coincidences, how animals bred in this way may be expected to reproduce the personal characteristics of their ancestors.—*Bell's Messenger*.

GROOMING AND FEEDING HORSES.

A few words now about grooming and management. Every horse should be thoroughly cleaned each day. The bedding instead of being thrown under the manger to fill his food, eyes, and lungs with ammonia, should be thrown behind him or out of doors to air. His manger should be kept clean, and once a week washed with salt and water and salt left in it. One night in each week, he should have a warm bran mash—eight quarts—generally given, on Satur-