

another. Be this as it may, the practical fact was long known before the theory was dreamed of. The chief use of beans in this country is to feed horses, for which they are very usefully mixed with oats, as they contain the tanning principle, and tend to bind the muscular frame. They are also used in fattening hogs, bruised and unbruised: they make the flesh very firm. Bean meal is used in fattening oxen; mixed with water, and given to cows, it greatly increases the quantity of milk. Some beans are also mixed with new wheats in grinding. Millers generally contrive to use a due proportion, pretending that the clammy new wheats will not grind well without some such mixture. The medicinal qualities of beans are said to be nutritive, but flatulent; the pods yield a water held good against the gripes in children. The bean has been used as a succedaneum to coffee, which in principle, it much resembles—only that it contains but half the quantity of oil. Flatulency is occasioned by the great quantity of air they contain, and which is extricated, and cannot be again absorbed during their digestion in the stomach. The expansion of beans in growing is very great, one bean being sufficient to raise a weight of 100lbs.—*Donaldson's Plants of the Farm.*

SHOEING HORSES.—Mr. George Turner, of Barton, near Exeter, having presented at the former meeting of the council, a set of Mr. Miles's model hoofs, illustrating the mode of shoeing horses advocated in that gentleman's work on the foot of the horse, a copy of which Mr. Turner also presented at the same time, an interesting discussion ensued on this subject, in which Mr. Thomas Turner, Professor Sewell, Colonel Challoner, and Mr. Parkins took part. Mr. Turner stated that the system of shoeing advocated by Mr. Miles, was known in the profession as the "unilateral" (or side-nailing) mode, in which the shoe was nailed to the hoof with the most decided effects in preventing the navicular disease to which the horse's hoof was so frequently liable; a system, he added, which in common justice he might be allowed to say was founded upon the important principle discovered by his brother, Mr. James Turner, V. S., of Regent-street, and published by him many years ago in his work on the foot of the horse, of which at the next meeting of the Council a copy should be presented for the acceptance of the Society.

Prof. Sewell remarked that he had found old

horses shod with a layer of leather, forming an artificial sole, between the shoe and the hoof, to recover from the severe affections arising from injury to the hoof; such, for instance, as contractions, brittleness, sand cracks, or disease even of the foot itself, such as thrushes, cankers and corns, and perfectly regain their original elasticity and firmness: he also strongly advised that all horses for road or street work should be shod in that manner, during the whole period of their being required for use. The plan in question had been employed by Prof. Sewell for the last 30 years. The leather sole prevented that concussion from taking place against the sensitive part of the foot, which resulted in inflammation; and by excluding all injurious substances from the hoof, those frequent accidents were avoided which arose from the fall resulting from the bruising and puncturing occasioned by such hard and sharp substances as the natural horny sole. The plan required little practice to carry it out successfully, and it was not with an injudicious regard to economy to be abandoned, when after its adoption for some time it might seem, from the apparent soundness and safety of the feet, that the horse no longer required it.

Colonel Challoner observed, that 17 years ago Mr. James Turner had explained to him the principle of unilateral nailing, to which the attention of the Council was then called, and he had practised it on Colonel Challoner's horse for the avowed purpose of promoting the expansion of the hoof; but Colonel Challoner has since that time been led to adopt the plan of felt-shoeing for shell-footed horses, namely, the use of inserting, instead of leather, as practised by Professor Sewell, nothing more than thick felt or thick gun-wadding, between the shoe and the hoof of the horse. He had found this plan productive of the most beneficial results.

RAIN-GAUGE.—"The gauge selected was the one now most approved of, and most commonly used, consisting of a hollow cylinder of copper or other metal, about seven or eight inches in diameter, and 36 or 40 inches in length, with a receiving funnel of the same diameter as the cylinder, and closely fitted to the top. Within the cylinder a float rises, as it becomes filled with water. It is just so much smaller in diameter as to rise freely; and the centre is fixed an upright rod, marked in inches and tenths of an inch, which, rising through a small hole at the bottom of the funnel