

# Fundamental Principles of Health

By ALBERT S. GRAY, M.D.

## DUCTLESS GLANDS.

In a general way what may be said of any single ductless gland may in a large measure be said of them all. Their functions are mainly two. First, by reason of either individual or cooperative secretions they govern the metabolism in the body. Second, these same secretions build up and maintain the body's resistance to disease by cleansing the blood of the different poisons which it accumulates in its current from time to time. It is believed that the internal gland secretions whet the appetite of the white blood corpuscles, or leucocytes, the body's germ destroyer, as a step in this protective plan.

The biochemical salts involved in the breaking down (catabolic) and the building up (anabolic) processes of the body; the 16, and perhaps more, mineral elements existing in organic or living form in the universe and required to maintain the metabolism of all the cells of the human body, are governed, regulated and controlled by the ductless glands. This, of course, is a reciprocal reaction, because obviously there must be something to govern if the glands are to function, and it is equally obvious that the glands cannot function in the absence of these elements or minerals. There being no ducts leading into these glands, it is very clear that nothing can get either into or out of them except by means of the blood stream. Hence, the profound physical and mental disturbance following any disarrangement in the natural or physiological food supply.

The largest of the ductless glands is the thyroid, situated in the fore part of the neck, midway between the "Adam's apple" (thyroid cartilage) and the top of the breastbone (sternum), a point just behind where the average man wears his collar button. The gland comprises two sections, or lobes, one lying on either side of the windpipe (larynx), connected by a neck, or isthmus, the whole forming a flat, oval body about three inches long.

Because the general shape suggests a long, oval shield, the name "thyroid" was taken from the Greek language—it means, literally, shieldlike. The thyroid gland is reddish-brown in color and has a vesicular structure—that is to say, the interior is honey-combed with minute sacs like the interior of an orange, each tiny bladder of which under normal conditions is filled with a yellow gelatinous compound known as "colloid," a substance diffusing not at all, or very slowly, through animal membranes. Accessory thyroids, varying in size and number, may be found along the lower windpipe (trachea) from the larynx as far down as the heart. These accessories possess the same vesicular structure and are supposed to have a function similar to that of the thyroid body.

There are several highly significant facts in connection with the general structure and composition of the thyroid body that it is advisable to keep constantly in mind while considering this subject. Throughout the whole range of animal and vegetable life the catalytic enzymes, or ferments, are constantly busy. They are vitally and fundamentally concerned with life in all its phases, so much so that physiology is rapidly resolving itself into a branch of catalysis. So many catalytic agents are "colloids" and the colloidal condition is so tangled up with catalytic action, ferments and enzymes, it is practically impossible, in our present state of knowledge, to distinguish one from the other. It should be remembered, too, that all kinds of metals and compounds of metals have this powerful catalytic "presence," the potency of which may be so high that in many instances the proportion of but one part to the thirteenth decimal point will bring about astonishing reactions, meantime, the catalyzing substance itself being quite unaffected by its remarkable exertions; it remains as potent as ever and may be used over and over again.

No other gland, large or small, receives proportionally so great and direct a supply of blood as the thyroid. All these facts considered together are sufficient to warrant us in accepting the thyroid as a most important organ and should also prepare us to expect very grave physical results from any disturbance of its functions. Snuggly tucked away behind the thyroid, two of them on either side of the larynx and often actually imbedded in the tissue of that gland, are four small bodies known as the "parathyroids."

The adrenal glands take their name from the kidney; "ad" meaning addition, or proximity to, and "renal" being another name for kidney. These two additional kidney glands are flat, lima bean shaped bodies, each about one and one-half inches long, and they lie in intimate relation with and at the top of each kidney. It is believed both the inner (medullary) and the outer (cortical) parts of the adrenal glands make contributions to the blood stream. The absence of this medullary secretion produces a fall in blood pressure which is fatal.

Suspended by a short stalk from the under surface of the brain hangs another of these peslike bodies, or body glands. The early students of physiology believed this gland prepared plegm or mucus for the moistening of the membrane of the nose, and they therefore called it the "pituitary," which means the phlegm-former. The

pituitary body (hypophysis) consists of two parts, a large anterior lobe of distinct glandular tissue and a much smaller posterior lobe of nervous origin composed chiefly of nerve cells and fibers. Resting in a little bony depression in the base of one's skull, this tiny body prepares and sends out secretions and nerve impulses profoundly influencing us for good or evil.

Among all this complicated mass of action and reaction we are perhaps best familiar with the action of the thyroid gland, and no adequate explanation has yet been furnished of the influence exercised by the thyroid on the nutrition of the body. We have indisputable proof that disturbance in thyroid function induces characteristic symptoms covering practically the entire range of human affliction, and that these disturbances in glandular functions are gravely influenced by our choice of food matter. It is perfectly obvious that this must be so in view of the facts above set forth, and equally clear that Funk's statement that the vitamins, those vital nitrogenous principles in combination with the organic minerals, are the mother substance of the ductless gland internal secretions on which our development, life and health depend, and of which we are largely deprived through the stupid commercial spirit of the age.

## INTERNAL SECRETIONS.

We find running all through the history of the development of the theory of combating disease a slowly evolving chain of ideas revolving around the primitive belief of the savage that eating the heart of his victim imparted to him the courage and vitality of his enemy.

This idea has given rise from time to time to various methods of organotherapy, all of which have failed to be effective, but which have been valuable because they have served as steps toward a conception of the idea that certain glandular organs give rise to chemical products which on entering the circulation influence the activity of one or more other organs. The term "internal secretions" is used to designate these products.

Claude Bernard appears to have been the first to employ this term to distinguish between the ordinary or external secretions and these internal secretions. The belief that the secretory products were given off in this way had long been held in reference to the ductless glands, and this belief was perfectly logical because the absence of any duct naturally suggested such a possibility; but there was practically no interest in the matter of the internal secretions until reports of the work of Brown-Sequard upon testicular extracts were published prior to 1850. This investigator assumed that all tissues give off something to the blood which is characteristic and is of importance in general nutrition. The idea was taken up widely and it led to a strong revival of the old notions regarding the treatment of diseases of the different organs by extracts of the corresponding tissues, but no extract was found to be of any advantage in treating the troubles of the organs from which they were made.

Obviously, vital elements can be expected to flow only from live—that is to say, from functioning—organisms. It is not reasonable to expect more than temporary results from the non-living. However, while Brown-Sequard's idea was not found to be justified by subsequent work, it led to investigation and the development of the methods necessary to demonstrate that not only the ductless glands but some of the typical glands provided with ducts for external secretions give rise also to internal secretions, the pancreas and the liver being examples in point.

We have in our bodies ten or a dozen ductless glands which, as investigations have demonstrated, play a part of enormous importance in our general nutrition.

The principal ductless glands are the thyroid, parathyroid, suprarenal, thymus, pituitary, pineal, carotid and oocyeal. In some of these the existence or the non-existence of an internal secretion is still an open question, but it is quite safe to assume that, inasmuch as nothing can come into being without a reason and that nothing can continue to exist without a reason, a broader and deeper knowledge of the process of digestion and of our metabolism in general will demonstrate these supposedly useless organs to be endowed with some very important function. The promiscuous removal of "useless" organs is less general than it was and must become less and less as knowledge increases.

Outside the ductless glands the idea of internal secretions has recently found fruitful application in the study of the digestive secretions, and it has been clearly demonstrated that the gastric and the pancreatic "secretions," and perhaps other secretions from lower down in the digestive tract, must be regarded as examples of internal secretions, and that they must be reckoned with in our efforts to secure an understanding of the rapidly increasing mortality resulting from those diseases due to deranged metabolism.

Chemical products of this kind which stimulate the activity of special organs Sterling has designated as hormones, from the Greek word which means "I excite," and he suggests that these chemical products may be regarded as the original or primitive means for co-ordinating the functioning of the various parts of a complex organism. In other words, we are controlled by what may be called liquid nerves acting through our blood circulation as well as by the better known co-ordination secured through the medium of the later developed and wonderfully complex nervous system which we are able to dissect out and follow to its point of origin.

This double control, conclusively demonstrated to be operative in all mammals, is destined to play a revolutionary part in our ideas of disease and of our relationship to the balance of organic creation. It opens the way to a solution of many of our vague nervous diseases and is a most sympathetic warning against the use of sophisticated food materials.

## COMPLETE SYSTEM OF HOGGING OFF CROPS



Healthy Sow and Litter.

Prepared by the United States Department of Agriculture.

The familiar practice of hogging off crops has been developed by experts in the United States department of agriculture into a scientific system of farm management which, it is said, will minimize, in those sections and those farms to which it is adapted, the cost of harvest labor.

Reduced to its simplest terms this system, which is described in full in Farmers' Bulletin No. 614, "A Corn Belt System of Farming Which Saves Harvest-Labor by Hogging Down Crops," consists of a four or five-year rotation of corn, rye and a mixture of clover and timothy one or two years. A farm managed on this system should consist of four or five fields of from 20 to 40 acres each, and it is desirable that all the fields should be of approximately the same size. Farms should be laid out in accordance with the following plan:

1. Corn—First year to be hogged off.
2. Corn—Second year to be cut and rye sown.
3. Rye and Young Clover—Hogged off and pastured.
4. Clover and Timothy—Hog pastured.
5. Timothy and Clover—For hay or pasture.

Above is plan of a farm run on a five-year rotation. In field No. 1 the first year corn is grown and hogged off as soon as it is ripe. This is generally from September 1 to September 10. When the corn is cultivated for the last time, it is usually desirable to sow soy beans or rape, in order that the hogs may have pasturage while gathering the corn, and also because such a crop supplies valuable humus which can be turned back into the soil. In the following spring this field is prepared for second-year corn and becomes field No. 2 in the illustration.

Field No. 2 is, as we have seen, devoted to second year corn which is not hogged off but harvested by hand. Here rye is sown in the fall. Under favorable conditions this can be done while the corn is still standing, but if necessary it is not too late after the corn has been cut and shocked. Rye may be sown much later than wheat, and this is one of its great advantages in a rotation such as is now being described.

Field No. 3 is devoted to rye throughout the entire season. In the spring it is pastured by the hogs as long as it is palatable, affording excellent pasturage, especially for young hogs and brood sows. When the rye becomes tough and the hogs cease to relish it, they should be removed and not returned to the field until two

weeks after the rye has ripened. They should then be allowed to gather the entire crop and to graze upon the young clover that has come up with it.

Field No. 4 is devoted entirely to hog pasture. When clover and timothy are planted together, the hogs graze principally on the clover and leave most of the timothy to be cut for hay. In the five-year rotation, however, field No. 5 is depended upon to furnish the principal supply of hay for the horses and cows. There should be some surplus and this, of course, can be sold. Late in the fall the field is plowed for first year corn, and in the following spring it takes its place in the rotation as field No. 1.

Under such a system hogs furnish the principal income. They are turned in on the rye as early as possible in the spring and there they remain as long as the pasture is tender, although the brood sows should be taken to other inclosures as soon as the spring pigs can be weaned, and there bred for fall litters. Early in May when the rye probably ceases to afford good pasture the hogs are turned into field No. 4, devoted to first-year clover and timothy. With the addition of a reasonably liberal corn ration they feed on this until the middle of July, or two weeks after the rye has ripened, when they are turned back into the rye field and allowed to hog it all down without other feed. By the time the rye is harvested the corn in field No. 1 is ready for the hogs. If none of the stock is sold before, the hogs will gather all the corn by November 1. In this way with practically no labor and very little attention the entire herd is furnished with pasture and grain feed throughout the entire spring, summer and fall. In addition, there is the corn from field No. 2, which is harvested and not hogged down, and the surplus hay from fields No. 4 and 5.

Under this system, the only time when outside labor is indispensable is during the hay harvest. On a farm of a hundred acres it is not probable that this will amount to more than ten days' hired labor, which is certainly much less than is required by the systems of farm management in more general use. As for the cash income, it may be said that roughly speaking rye ultimately brings the same return, whether it is hogged down or cut and threshed and sold. In the latter case, however, there is all the cost of labor to be considered. To save this, is the main object of the system described.

## TIME FOR SELLING PIG CROP

Much Depends Upon Price of Feeding Materials and Development of Bone, Muscle and Vigor.

The best time to sell the pigs depends upon the price of feeding materials that may be utilized in growing them and developing their bone, muscle and vigor, and preparing them for the fattening period. When we have plenty of forage, skim milk and other home-grown foods, we often find it advantageous to allow them a longer period of growth than when we feed an exclusive grain diet. Market demands are for a medium-sized hog, with plenty of lean meat; strong, but not too coarse bone; plenty of activity and strength to stand up well during shipment.

Fall pigs, as a rule, are less profitable unless the feeder can utilize what would otherwise be waste feed in keeping them through the winter. Pigs that make good gains during the winter, and can be put on pasture in the spring, and then fattened in the fall, often make good gains during the longer periods, and cash in fine profits in the fall. On account of coming to maturity at the best time to breed for spring litters, we have found fall farrowed sows very desirable for breeding purposes. The second season gives them the bone and muscle development at a very low cost.

Warm drinking water, light, warm and dry quarters, succulent food with frequent change of breeding and diet, will insure good growth during the winter, but unless we are in the best shape to look after these details, we find it best to confine our feeding to spring litters. The fall pig that goes into the winter without a warm place to sleep and plenty of warm, nourishing food, has a winter of misery before it.

## Farm Profits.

The farm profits are for the most part made out of yields that are above the average. Average yields seldom pay more than the cost of production.

**English Sparrow a Nuisance.** The English sparrow is condemned for its destruction of cherries, grapes, pears, peaches, buds and flowers of cultivated trees, shrubs and vines. In the garden, the scientists say, sparrows eat seeds as they ripen, nip off tender young vegetables, especially peas and lettuce, as they appear above ground. We have never experienced this trouble, although sparrows are abundant about the garden. They are a nuisance with their messy building nests in troublesome places.

## MIDLINGS FOR YOUNG PIGS

If Rye Can Be Purchased for Less Money Than Wheat It Will Be to Advantage to Feed Them.

Chemical analyses indicate that there is nearly 75 per cent more fat and slightly more protein in wheat middlings than in rye middlings, although feeding tests show that wheat middlings are but very little better than rye middlings. Feeding tests have shown that pigs fed on rye middlings are quite likely to go off feed, which is not so common an occurrence with wheat middlings. With prices the same, wheat middlings would be the better feed, but if rye middlings can be purchased for somewhat less than the other, it will be to the feeder's advantage to use them.

## DAIRY NOTES

Bad hay or fodder should never be fed to the cow.

Sunlight is death to disease germs. Flood the stable with sunlight.

Always provide the cow with a good bed to lie on. Be a good friend to your cows.

Water with the chill taken out is best for the milk cows. Put a heater in the tank.

The reason many cows kick is because they have been kicked first. Ever think about that?

The way to produce milk profitably is to have cows bred for that purpose. Do not try to make a cow do two things at the same time.

Fertile farms are necessary if permanent agriculture is to be established and the dairy cow offers the simplest and best possible means of securing these fertile fields.

In the gutters on the roof, causing the water to overflow and littering the building generally, but this is the worst charge we are able to bring against the English sparrow. Exchange.

**The Right Sort.** "Apropos of the Indians who are fighting in France, a thought struck me." "What was it?" "A good kind to use in their trench work would be the Digger Indians."

## FOR COLORED SALADS

DISHES THAT ADD ATTRACTION TO TABLE.

Possible to Make Them in Almost Any Color Desired—Orange Salad One of the Particular Favorites.

**Yellow.**—To make a yellow salad at this time of year use the yellow heart leaves of lettuce. On them put sliced orange pulp, dressed with French dressing, and sprinkled with chopped walnut meats. Or else scoop out the centers of small yellow-skinned apples and fill them with a mixture of orange and apple, dressed with mayonnaise made with lemon juice for thinning and flavoring of mustard.

**Green.**—On green but tender leaves of lettuce, put a little mound of spinach which has been boiled and pressed through a sieve and mixed with French dressing. In the center of each mound, concealed by the spinach, put a spoonful of chopped hard-boiled egg.

**Green and White.**—Peel and boil tiny white turnips of equal size and hollow out the center of each. Fill with cold boiled peas and mayonnaise and put on green lettuce leaves.

**White.**—Celery, potato, chicken—white meat only—whitefish, blanched asparagus—any or two of these may be used for white salad. Dress with French dressing or with a white mayonnaise, to which the beaten white of an egg has been added and which has been thinned with vinegar.

**Red.**—Scoop out the insides of tomatoes. Save the slice removed from the top for a cover and replace it on the tomato after filling it with a mixture of celery and nut meats, mixed with mayonnaise. Place each tomato on a white leaf of lettuce.

**Pink.**—Strain tomato juice and mix it with equal quantity of white stock—veal or chicken. Thicken sufficiently with gelatin and harden in molds. Serve on white lettuce leaves, with mayonnaise that has been colored with a little cranberry juice.

**Orange Salad.**—Make mayonnaise with much egg yolk in proportion to other ingredients, and thin with cider vinegar. Dice tender carrots and arrange on lettuce leaves, dressing with orange mayonnaise.

## ALL AROUND THE HOUSE

If your soup is too salty try adding a few slices of raw potatoes and cook a little longer. The potatoes will absorb the surplus salt.

Before stuffing a chicken rub it inside and out with bacon drippings. Sausage instead of stuffing in a chicken is an agreeable thing.

A generous piece of newspaper, crumpled into ridges acts as an efficient drain to all croquettes, fritters, doughnuts and bacon.

Rubber bands are inexpensive and are of great use in preparing lunches to fasten the waxed paper around sandwiches, cakes, fruits, etc.

When running dates or figs through the meat chopper add a few drops of lemon juice to prevent the fruit from clogging the chopper.

Kitchen scissors for cutting raisins and figs, lettuce, parsley, and so on are exceedingly handy.

## Meatless Mince Pie.

Half a cup of molasses, two-thirds cupful of water, two-thirds of a cupful of vinegar, one cupful of sugar, one cupful of breadcrumbs, one cupful of chopped raisins, one cupful of minced apples, one tablespoonful of cloves, one tablespoonful of cinnamon, one nutmeg grated, and add a piece of butter the size of a hen's egg. Mix all the ingredients and heat the mixture thoroughly without really allowing it to cook, stirring it often. While hot, fill into the pie pans, baking it with two crusts.

## Baked Apples.

Select large tart apples. Wash and wipe dry. Remove the centers with an apple corer. Arrange them in a pan, with a very little water, filling the centers with sugar. Dip the sirup over them two or three times while baking. Serve warm with cream. These may be made more delicate by parting the apples and baking in an earthen pudding dish, filling the centers with sugar, chopped raisins and nuts, a piece of butter and a little lemon juice.

## Fish Turbot.

Here is a nice recipe called fish turbot: Steam a white fish until tender, take out bones and sprinkle with pepper and salt. For dressing heat one pint of milk and thicken with a quarter pound of flour. When cool add two eggs, quarter pound butter and season with onion and parsley; put in baking dish a layer of fish, then a layer of sauce until full. Cover with crumbs and bake half hour.

## Macaroni Souffle.

Into one cupful of cream sauce seasoned with salt, pepper, minced parsley and onion juice stir one cupful of chopped boiled macaroni. When hot add beaten yolks of two eggs, cook one minute and set away to cool. When cold stir in stiffly beaten whites of eggs; cover with grated cheese or crumbs and bake in a buttered dish 30 minutes. Serve with mushroom sauce.

## Coffee Frappe.

Put two ounces of finely pounded fresh roasted coffee into a pint of milk with six ounces of loaf sugar; let it boil, then leave it to get cold; strain it on the yolks of six eggs in a double boiler and stir on the fire till the custard thickens; when quite cold work into it a gill and a half of whipped cream; freeze the mixture; then fill the mold and keep on ice until the time of serving.

# M'Millan's Juja Farm

OUT in British East Africa, almost directly under the equator, lies Juja Farm, the immense ranch owned by William N. McMillan, once a business man in St. Louis. After twenty years of exploration and adventure, he has settled down there to the relatively quiet life of a farmer and hunter, and his greatest excitement nowadays comes in the entertainment of some noted hunter of big game, like Theodore Roosevelt, the sultan of Zanzibar, Lord Londsdale, Aga Khan and Chase Osborn of Michigan.

The 40,000 acres of Juja Farm, and the smaller 15,000-acre holdings of Mrs. McMillan, Mus Farm, some 15 miles away, stand 5,500 feet above sea level, on the great Mus escarpment of Eastern Africa, 325 miles inland from Mombasa, principal British African port in the Indian ocean.

Here, in a long, low, one-story farmhouse, with vine-covered verandas and numerous outbuildings, Mr. McMillan lives the life of a British landed proprietor, in almost feudal splendor, ruling the natives residing on his holdings, hunting the elephant, the rhinoceros and the lion, and protecting his herds and flocks and people from their ravages. On his broad acres, the lordly lion and his vicious spouse, king it over their fellow creatures; here are rhinoceros, hideous hyena and beautiful leopard; here graceful gazelle and powerful, ungainly gnu, alert and wary, cross the endless flats; here, the vine-covered veranda of the low-beamed house can be seen black and white striped zebra and ruddy hartebeest, reed buck and waterbuck, immense eland and tiny dikdik, and all the other half hundred antelope varieties that disport on the equatorial plains. In the papyrus marshes dotting the bosom of the swamps and rimming every sea-green lake, the terrible

being mayor and chief of police, board of city fathers and municipal justice, all bound up in one stalwart, impressive presence, for under the colonial system of British government, as a landed proprietor, holding acreage under purchase from the crown, and more than 15 miles from town or other seat of permanent justice, he is endowed with magisterial powers, and may settle all cases of minor misdemeanors, theft and petty savage knavery, which carry with them no deprivation of liberty.

Of this vast plantation only a small part is under cultivation, but the wide fields of sprouting maize, the great stretches of sisal hemp and coffee, the clustering blossoms of the American orchard and the sweet fragrance of the gardens all testify to the wealth and generosity of the soil of the farmstead. Cattle and sheep, horses and monkeys graze in the thick lush grass of the high slopes, beside the queer, beehive huts of the natives, under the care of Masai shepherds.

**Buffalo Most Dangerous.** Unlike Mr. Roosevelt, who has expressed the opinion that the lion is the most dangerous of African animals to hunt, and Sir Samuel Baker and other mighty hunters, who yield the palm to the elephant, Mr. McMillan, after almost 15 years' experience, unhesitatingly places the water buffalo as the most dangerous foe to human life, when wounded and brought to bay by the huntsman.

The rhinoceros, in Mr. McMillan's opinion is of little actual danger to an experienced and thoroughly alert man. Possessed, apparently, of the most savage and erratic temper of any of the larger animals, it can see but poorly out of those red, pig-like eyes, being scarcely able to distinguish a man a short distance away. Then, when he



RHINOCEROS HUNTING ON JUJA FARM

buffalo and the queer, strange looking warthog make sinuous lanes of passage, while in the deeper waters lie sluggish hippopotami and voracious, insatiable crocodiles. The mining ostrich preens itself among the flat-topped acacias, and in the taller, sturdier mimosa growths the giraffe keeps keen-eyed vigil for the approaching foe.

Overhead, from the taller branches and under foot in the jungle growths, come the trills and calls and reed-like notes of the bewildering wealth of bird life that fills the tropic forests, while threading serenely through this nature's wonderland, pass to and fro the natives of the estate, the well-nigh naked savage, primitive Wakamba, and unsmiling, serious Kikuyu, warlike Masai and more civilized Mohammedan Somali.

**An Army of Servants.** There are some 600 natives of the various tribes employed on Juja Farm, house servants and farm hands, laborers, horse boys, shepherds, porters and askari, or native soldiery. Over these Mr. McMillan rules with a kindly rein.

## Ancient King a Terror.

Mithridates, king of Pontus, is rarely mentioned nowadays, but in the year 88 B. C. he was the terror of the world. He killed his own family, slaughtered seven different kings and their courts, marched through Asia and left everywhere trails of dead. He invaded Greece and there slaughtered nearly half a million human beings, then he marched against Rome with awful carnage. In his own army he lost only 55,000 men, but he is thought to have killed at least twenty times that number of his enemies.

## Old Pension Plan.

They had a roundabout way of bestowing military pensions in the old days. Witness this official communication from the British war office in the reign of Queen Anne. Her majesty, it runs, has been pleased to grant Piton Minehull, a child, a commission as ensign in consequence of the loss of his father, who died in the service. And Piton was at the same time granted furlough until further order, his army pay being sent regularly to his mother.

charges, he runs blindly, throwing his huge bulk forward in a straight line from which he seldom deviates. The hunter, if he be sure-footed and collected, should his fire fall to stop the gigantic beast, can easily evade him by dodging, stepping aside when the charge is almost upon him, and there is but little likelihood of the rhino returning to the attack.

These animals are much given to wanton attacks, seemingly running amuck at times. On one such occasion, a rhino came out of the nearby brush and charged wildly through the Juja Farm garden. Coming upon one of the native laborers who, squatting in a savage style on his haunches, was weeding the flower beds, he impaled the unsuspecting negro on his long horn, tossed him high into the air, and trampled on in his errand of destruction. He reached the road outside, charged lengthwise through a 16-yoke oxen team, upsetting the wagon, and then, going out to the plain beyond, charged the farm overseer and was promptly shot by that experienced huntsman.

## Answered His Question.

Prince George of Denmark was nicknamed "Est-il possible" by James II. It is said that when the startling events of the revolution of 1688 succeeded one another with breathless rapidity, the emotions of Prince George found vent in the repeated exclamation: "Est-il possible?" King James, enumerating those who had forsaken him, said: "And est-il possible has gone, too!"

## When Dad is All Right.

He may have a greasy hat and the seat of his pants may be shiny, but if a man's children have their noses flattened against the window pane a half hour before he is due home to supper, you can trust him with anything you have. He is all right—Cincinnati Enquirer.

## Vinegar in Ink.

Very often ink gets stringy or oily. This is caused by the action of the air. A few drops of vinegar put into the ink will make it usable again, but the better plan is to keep the ink bottle covered.