

## Royal Favorites

A Chat on the Latest Dogs in Literature—Queen Victoria and Her Canine Pets—Valuable Animals to Which Expensive Monuments Have Been Erected.

(Gilda Friederichs, in Lady Aberdeen's Onward and Upward.)

You may, at first sight, think it a curious selection that I have put before the readers of Onward and Upward, a subject from the Ladies' Kennel Journal, which is published by the authority and under the patronage of the Ladies' Kennel Association. The title of this charmingly written and illustrated series is "Queen Victoria's Dogs." It deals with the happy families of dogs living in a beautiful home in the private parts of Windsor Park. The first of the articles only introduces the subject, and philosophizes pleasantly, at first, on the fact that dogs have, since the time of Guinevere and King Arthur, been among the royal retainers of the British court. As for the royal dogs of the present reign, the writer says:

As in many thousands of humbler English homes there has always been found a place for dogs in the household of the sovereign, so that our princes and princesses, during their childhood, have grown up into men and women valuing them as companions, and loving them as faithful friends. In this, as in so many other ways, the Queen's individual tastes have worked for the public good, for the knowledge of her personal affection for the dumb creatures within her gates is a household word. Even the little ones in the nursery learn from their picture-books that the Queen of England is "fond" of dogs, and are familiar with the names of Noble and of Roy, while her patronage to the Royal Society that exists for the promotion of cruelty is a tower of strength and of protection to the speechless world.

In past times the dogs of queens and princesses seem to have mostly been "small spaniels" and other diminutive creatures, but Queen Victoria, apart from pugs, seems to favor large dogs, for the chief inhabitants of the royal kennels are collies, Spitzes, Skyes, dachshunds, fox terriers, and here and there a St. Bernard, a pointer, a deerhound, or a borzoi. The collie and the Spitz, it appears, are special favorites, and it is from among these that her Majesty's "personal attendants" are generally chosen. One is glad to come across the following paragraph in the prefatory sketch to the account of a visit to the kennels: "Her Majesty never has near her a dog that has been either cropped or docked, and the dogs that have been given here are some that have been mutilated, these are dogs of the kennel only, and not 'in the house.' When, too, the muzzling order was put in force with the alternative of 'proper control,' the Queen invariably chose the latter, and never allowed any of her dogs to be worried. This is only one more proof of the Queen's sympathetic and womanly nature."

Strange to say, few inhabitants of the Royal Borough seem to be aware of the "kennels," though they are within a mile of the railway station at Windsor. The drive is a very pleasant one, as most drives are in the neighborhood of that stately of royal residences, Windsor Castle. It leads along the beautiful long walk in the park. On entering it the writer muses:

Linger for a moment to look at the castle full in front. It is well to commence the day with the impression on one's mind of its stately restfulness. That is the sovereign's entrance facing you, and along that carriage way at one time or another nearly every monarch of the world has driven to have audience of the Queen-Empress. No road has more august associations, more memorable a history, than that yellow strip of gravel.

After a while you turn into her Majesty's private grounds, which may only be entered by special permission. You have behind the museum and several private residences situated in that lovely, peaceful greenery, and branch off at Frogmore House, into the one of three drives which leads straight to the kennels—a picturesque group of buildings.

Through a charming diversity of pretty "bits" and lovely foliage effects, weeping ash and willow marking the course of a little stream that crosses the road, while in the park we catch sight, here and there, of some vast dead tree. Titans in their day, that must have been noble vegetables when Queen Bess was on the throne—contemporaries no doubt of Yarnham's Hunter's oak, that was a trying place in Shakespeare's time, and in the place of which, in 1863, Queen Victoria planted another—enormous dead boles with the arms stretching antler-like about them, and pitiously holding up bare, withered arms to the sun, whose warmth they can no longer feel.

When the Queen on her drives stops to look at the dogs, her carriage drives to a certain "Queen's door," the "Singly or in couples, the animals which she wishes to see are brought out, and are either handed up into the carriage, to be petted, or are let loose, in groups, in the paddock, which the dog gives admission, so that the Queen may see them at play together. It is generally the playground of the Spitzes, but on the occasion of royal visits is the parade ground of each kennel in turn.

Her Majesty seldom comes to the kennels without going to see the puppies, for, like everyone else who is really fond of dogs, she takes great interest in their nursery affairs.

The appointments of the Home Park kennels are, of course, in accordance with the high estate of the sovereign lady who owns them. For instance—each kennel is twenty feet long by twelve wide, and is divided in the middle by a strong iron door into the dormitory and a yard, the former being tiled with white and fitted with hot water pipes for warming them when necessary, and the latter floored in red and blue, like the verandah, and have in each corner automatic-filling drinking water troughs. The beds are of wood and the bedding is straw.

There is a dog kitchen, a nursery and an hospital. The description of all these various departments is charming, and one is particularly pleased with the hospital, which.

Fitted with three little "wards" or stalls, is, of course, appointed with great completeness, but a model hospital was empty. Nor had it had patient for many months, so healthy the dogs keep with plenty of exercise, thorough cleanliness, and no overfeeding, for it should be noted that there is no pampering in the Queen's kennels. Rational living is always the

secret of health with dogs as with men, and rational is the rule in the Home Park kennels. Each dog gets its due amount of exercise, its one meal of simple food, and its proper grooming, and the result is health all round, and with health come good spirits and good nature.

In a very amusing paragraph are described the difficulties of the photographer ambitious "take" successfully a litter of five lively and inquisitive Spitz puppies—

What a business it was, and how absurd to any onlooker—the spectacle of four grown-up human beings trying to get five Spitz puppies all quiet at once! But they were like Jack-in-the-boxes, and their heads would bob up, or else they would misunderstand us, and, thinking we wanted them all, they would curl themselves up, inside out, in a hopeless heap of fluff. Oh, those puppies, we could have eaten them! But the sight of Hill advancing on all fours, backwards, to the accompaniment of a penny whistle, was too much for them, and for half an instant they stood still to wonder at the performance, just the half instant that our clever artist wanted. They made a sweet picture.

Her Majesty always takes some of her favorite dogs with her to whatever royal residence she may inhabit, in England, or Scotland, and one or two Spitzes are invariably among those "commanded to go to court." The third article of this fascinating series deals with the Queen's collie dogs. This breed, we are told, has enjoyed a lasting preference, which is not surprising, for what more dog could be found anywhere than an affectionate, intelligent, loyal and beautiful collie? These collies are the largest dogs in the kennels, and it is interesting to read that many of them "have no chance in the show ring, since her Majesty does not apportion her favor according to 'points.' Every dog in the kennels has its name given to it by the Queen herself."

Moreover, her Majesty will not allow any puppy born in her kennels to be destroyed, holding herself, as it were, responsible for the lives of all the little "strangers within her gates," and extending her protection to them all alike. If any difference be made at all among the dogs, it is that, while most have names, there are some that go to their graves without one. Perhaps this is a whimsicality, anything but these unchristened puppies, and not worth ending with identity, but all the same the ugly ducklings live out their lives in happiness, and, for all they know, are just as fortunate as the best.

The names that are given to the favored are, some of them, no doubt, reminiscences suggested by the puppies themselves, some trick of manner, some expression of face, and some what all alike. If any difference be made at all among the dogs, it is that, while most have names, there are some that go to their graves without one. Perhaps this is a whimsicality, anything but these unchristened puppies, and not worth ending with identity, but all the same the ugly ducklings live out their lives in happiness, and, for all they know, are just as fortunate as the best.

One of the dogs in the royal kennels whose fame has been spread far and wide is Snowball. The following paragraphs embody his history:

Perhaps of the collies in Home Park, Snowball may be said to be the best known outside the royal demesne, as he has figured in almost every record of the past. He has been written of in the papers, and his name is on the list of dogs that have won prizes at the dog shows. He is, owing to a disease of the ear, he was placed by the Queen with her shepherd, who lives at Datchet Ferry, in order to insure him against rough treatment from the other dogs. At his ease in the shepherd's home, Snowball's daily life is spent, for the most part in comfort and seclusion, musing like Spenser, upon "the silences of the night," and "the sweet past home. Once a day he enjoys a sober constitutional, sometimes helping to bring in the sheep, at others to see and report himself to Hill. Snowball is rightly named, for he is snow-white, except the tip of his ear, his pretty small ears are lemon-tinted, and that he has the much-to-be-desired black nose and deliciously soft, brown eyes, which give a most benign expression to his broad, white face. A wider skull than is now seen among prize-winners. But the width suits the noble appearance of the dog, which is covered with a wonderful coat having the perfection of a dense underwool in which no parting can be made or seen. His legs are well fringed, standing on good cat-knuckled feet, and his tail has just the swirl described by Burns. Taking him all in all, Snowball is a decidedly handsome dog."

The fourth of the charming series of articles on "Queen Victoria's Dogs" deals again chiefly with the collies in the Home Park kennels. Apart from the biographical details given, there are some interesting scenes from the home life of the dogs, such as, for instance, the following particulars concerning the habits of the mottled Lily.

Lily is one of the few collies who will take advantage of the bath in the Umbrella Court. This paddock, the center one of the three upon which the Queen's veranda looks, has in the middle of it an apple tree that, of a shadowy green, and in addition, there is a large wooden umbrella fixed in the tiled platform at the end of the bath. This platform slopes down into the water, giving the dogs, if they only care to use it, an easy approach to a deep swim. The water is always as clear as crystal—the bottom of tiles being perfectly visible—and yet the collies will not use it. Take them out on a walk in the park, and it is with the greatest difficulty they can be kept out of the turbid Thames, or a muddy ditch, but to their own delightful bath they will have nothing to say. There it is, as delightful a little "tank" in the Indian sense as dog or even human being could wish for, with a gentle incline to walk up when they are tired of splashing. But, no, they will try to take to the river, or to any forbidden water they may pass, but as to that carefully planned and most admirable bath, they will have none of it. The umbrella, they thoroughly appreciate, and to see them—Lily, merle Nellie, the sables, and the black and tans, grouped at their ease in its shadow, is a sight that no dog lover, having seen it, can ever forget.

Among the collies of the past there is—first and foremost—the famous Sharp, one of whose portraits, after he came into her Majesty's possession, was taken together with John Brown, the "devoted personal attendant and faithful friend." Sharp accompanied the court on most of its journeys to Scot-

land. When he was eleven years old the Queen left him behind at Windsor, where the Queen went north, but as

soon as her Majesty returned, he became again a dog "of the house," and in this way alternating between the palace and the kennels, the old favorite lived, well loved, and cared for, until 1871, when it was thought best to leave him undisturbed in the kennels, and there, two years later—in November, 1873—he died, tenderly, and to this day regretted by the Queen. Sharp will be known hereafter as, without rival, the Queen's most favored dog; for besides the unique honor of the statue, he lives for all time in the walk near the Orangery, in full life effigy in bronze, guarding his mistress's glove. Just at the foot of the East Terrace, where Queen Victoria's walk forms an angle, with the path fronting her Ma-

jesty's private apartments, stands a cedar, overshadowing a little triangle of turf. Round the tree is a seat commanding a beautiful view of the park, upon which, we are told, the Queen used often to rest, and facing a granite slab some two feet high, and at the point of the triangle is Boehm's noble cast of Sharp in bronze, lying at full length, with his head upon one paw, on guard over the Queen's glove. It is raised from the turf on a granite slab some two feet high, and on this is the inscription:

"SHARP."

The favorite and faithful collie of Queen Victoria, from 1865 to 1873. Died November, 1873, aged 15 years.

## Missing Links

Gossip From Every Land Summarized for Busy Readers.

ONCE a year the Emperor of China plows a furrow, in order to dignify agriculture in the eyes of his people. The ceremony is invested with great pomp.

A SEPOY regiment will walk a European regiment to death, and do it on foot which their competitors would pronounce wholly insufficient to sustain vigorous life.

THE late Lord Leighton's magnificent house in London is now the property of the Royal Academy of Arts, to be used as an official residence for future presidents.

WHAT is claimed to be the largest single pane of glass in the country was received at Hartford, Conn., from Belgium recently. It is 12 1/2 feet high, 15 1/2 feet wide, 1-2 inch thick, and weighs 1,800 pounds.

Mr. Alfred Austin has received the sum of £12 in lieu of the tierce of Canary wine, a perquisite granted to the poet laureate by Charles I. On Southey's appointment to the Laureateship in 1813 it was commuted to £27.

THE greatest depth, writes Prof. Seeley in his "Story of the Earth," at which earthquakes are known to originate, is about 30 miles. It has also been calculated that a heat sufficient to melt granite might occur at about the same depth.

A LONDON paper reveals the important fact that the church scene in "Michael and His Lost Angel" was arranged in every detail by a clergyman of the Church of England—Prof. Shuttleworth, rector of St. Nicholas Cole Abbey, in the city.

DURING the recent war amenities between England and Germany, the London Shipping Exchange sent the following telegram to the German Emperor: "No need to send 5,000 Germans from your country; we can most readily spare them from here."

A REGULAR Hindustanee carrier, with a weight of 80 pounds on his shoulders—carried, of course, in two divisions, hung on his neck by a yoke—will, if properly paid, load along over 100 miles in 24 hours, a feat, which would exhaust any but the best trained runners.

THE lines on no two human hands are exactly alike. This fact is utilized in China in an interesting way. When a traveler desires a passport, the palm of his hand is covered with fine oil paint and an impression is taken on thin, damp paper. This paper, officially signed, is his passport.

THE late Prince Henry of Battenberg realized the danger to which he was exposed in Ashantee. One night at Prahu before he was taken ill he remarked at mess: "As a prince I may occasionally fare somewhat better than the rest, but we are all now before one common foe—the fever."

GOLD fish are not difficult to keep, but they require attention, and if properly attended they will live ten or twelve years. In the first place, use nice, clear globes, and once a week clean each globe out well by transferring your fish with a net to another receptacle, and then washing the globe with tepid water.

RULERS and governments often think the press a nuisance, but there are occasions when even kings discover that a newspaper is a good thing. During the late Transvaal troubles Emperor William called twice a day at the office of the Berliner Tageblatt to discover if any special telegrams had arrived from South Africa.

A MOST extraordinary guard takes up its quarters in the Bank of England every evening at 7 o'clock all the year around, remaining there until 7 o'clock the next morning. It is an officer's guard, and consists of a drummer, two sergeants, and 30 men, all well armed. Each man receives a shilling upon his arrival.

THE youngest member of the British Parliament is Lord Milton, who is 23. There is 70 years difference between his age and that of Charles, Viscount Villiers, "the father of the House of Commons." Among other youthful members of the new Parliament are A. B. Bathurst, 25; Richard Cavendish, 24, and T. B. Curran, 25.

GEORGE EBERS, the Egyptologist, has discovered that many of the queer medical recipes found in the old English and German books come from the ancient Egyptians. They were known to the Greeks, but were spread from Salerno, the great medical school of the middle ages, through which they must have come through Coptic and Arabic translations.

ONE of the most curious enemies of British fresh water fishes is a small floating water weed—the bladder-wort. Along its branches are a number of small green vesicles, or bladders, which, being furnished with tiny jaws, seize upon the little fish, which are assimilated into its substance. This is a subtle poacher, the true character of which has only lately been detected.

IT IS an interesting fact that the new railway station at Jerusalem is in the Vale of Hinnom, and on the exact spot which used to be the site of the Gehenna of the New Testament. The London Freeman intimates that there can be no doubt about the matter, as this locality of fire and of "the fire that was never quenched" was for hundreds of years as well known to the Jews as Newgate Prison and its locality are to the Londoner.

HOW the fat livings of the State Church of Eireland are disposed of is

illustrated in the following paragraph which appears in the Westminster Gazette: "The rectory of Arthuret, Cumberland, which is believed to be the richest living in the diocese of Carlisle, being the net value of £200 a year, with residence, has become vacant by the death of the Rev. Malise Graham, who was a son of the famous Sir James Graham. The trustees of Sir F. Graham have presented his nephew, the Rev. Ivor Graham, who is a son of the late rectory."

VISCOUNT MIDDLETON, the new Lord Lieutenant of Surrey, spends a considerable portion of his time at Peper Harow Park, Godalming. The story is told that on one occasion the late poet laureate was attending a garden party there, and with characteristic frankness expressed his views on sandwiches. "Don't like those dry things," said Lord Tennyson to the footman as he held the dish. "You need not have said that," replied the footman. "This is the first time I knew it was rude to speak your own mind," was the blunt rejoinder.

BARNEY BARNATO endures unmoved the many newspaper attacks on himself and his schemes. He says that on only one occasion have the newspapers succeeded in causing him real pain. He was playing in private theatricals at a big country house. He played, as he believed, extremely well, and was immensely proud of himself in consequence. Next day Barney went to the nearest town, bought some oranges, and proceeded to juggle them in the market place. But the local papers remained silent, and in disgust Mr. Barnato went back to London.

IN THE valley of the Nahe River, in Southwestern Germany, nearly the whole population is employed in the grinding of achate, a mineral which is used by jewelers in the arts. The work, however, is so murderous that 62 per cent of the population is consumptive. In one community, for instance, the death rate is frightful, 6-10 of those who died during the last five years being men between 20 and 40, and with a population of but 844 there are 105 widows. The children, even, are born consumptive. Now the district government is taking hold of the problem of improving the state of affairs there.

A WARSAW lady recently engaged a quiet, respectable looking girl of 16 to look after her 18-months-old baby. As soon as he saw the nurse, the child was frightened into convulsions; the girl was asked to go into another room, where the master of the house was entertaining half a dozen guests. On her entering the room, a standard lamp on the table blazed up to the ceiling, three large oil paintings fell down from the wall, and a large barometer flew across the room and was smashed. The girl was not alarmed, and admitted that such accidents happened frequently when she was present. She is a pale, slight girl, who suffers from insomnia. Dr. Ochorowicz, the psychologist is investigating the case.

S. R. CROCKETT, the novelist, has been telling how he used to raise the heat when a hard-up student in Edinburgh. He lodged with a friend over a great coal station, and he used to go out in the evening and pick up the coals which the carts had dropped in the streets. "Sometimes," he says, "I grew so bold as to chuck a lump of coal at a driver, who invariably looked at me with a great deal of interest. The biggest lump on his load he hit back with, which was that I wanted. Thus the exercise warmed me at the time, and the coal warmed me afterwards. And occasionally we got a little bit of a fight, with children or companions, and buy a book or two. But I wish here and now, solemnly to state that I never, never condescended to lift a lump off a cart, at least, hardly."

Well, unless it was manifestly inconvenient the safety of the load, or overburdening the safety of the horse, you know."

PRINCESS BEATRICE will continue to draw her income of \$30,000 a year, as it was made a life grant at the time of her marriage. By the death of the Duke of Clarence his brother and sisters gained in income, as the \$180,000 a year voted for the Prince of Wales' children continued all the same. This provision must serve them during the present reign, whether their state be married or single, with children or without. The Duke of York had no extra allowance on his marriage. The deaths which lost money to the royal family were that of the late Prince Consort, whose yearly \$150,000 ceased; that of the Princess Alice, whose \$20,000 a year, as Queen's daughter, was not continued to her German children, and that of the Duke of Albany, whose \$125,000 a year, as Queen's son, dropped immediately after he was but partly repaid by a \$20,000 a year from the nation to his widow.

ONE of the London magistrates said, a few days ago: "The man who is always trying to enforce his legal rights will often do great wrongs." We have just had a singular illustration of this in the little town of Buckfastleigh, Devonshire. A man living there went into the churchyard to visit the grave of a member of his family, and he was horrified to find the graveyard turned into a sheep-fold. The floral wreaths which had been placed on the graves were destroyed, the grass was torn, and the place altogether shamefully desecrated. On inquiry he found that the lay rector, who is no less a personage than the Earl of Maclesfield, is responsible for the scandal. The Earl wished the vicar to pay him rent for the use of the graveyard, but the vicar refused, not wishing to give so formal a recognition of the Earl's proprietary rights. So the land was let to somebody else as a sheep-fold, with the result seen. In this action the Earl is within his legal rights.

## Among the Comets.

"Hairy Stars" Attended by Imposing Trains—Messengers Royal From Distant Celestial Dynasties Which Have Startled the World in All Ages.

Of all the varied celestial phenomena probably the most fascinating, as well as awe-inspiring, is the apparition of a great comet. For the mysterious visitors from realms far beyond the range of human vision, attended by majestic trains of glittering gauze, have ever been regarded by the superstitious as precursors of famine, pestilence or war, and in view of the possibility of a collision between one of these erratic wanderers and the earth, however remote, even some enlightened persons have breathed a little more freely when the brilliant, but obtrusive, rover has wheeled away and its appendage of splendor become dimmed by distance.

More than half a century has elapsed since the great comet of 1843 innocently served to intensify faith in Miller's famous prediction of "the end of the world"; but our planet moves serenely on, while a greater comet in some respect than that of 1843 has come and gone, to say nothing of a number of other interesting ones. The fact is that the "chance" of collision is only one in many millions, or, say, "one in 15,000,000 years."

If we use a clock dial to illustrate the plane of the earth's orbit, placing the sun at the center post, with the earth revolving in the circle of the minutes, we may suppose a comet to enter the dial at the figure 12, and move toward the center, doubling around it and leaving the dial at the figure 9, or vice versa. The "period" of the comet depends upon the angular degree at which it leaves the dial, "the closing" curve would involve a long eclipse and return visits, and a little widening might mean a hyperbolic orbit, with an eternal farewell to the comet.

But it must not be presumed that the plane of the comet's orbit is necessarily coincident with that of the earth's orbit. It may be very greatly inclined—i. e., "tipped"—to it, coming down upon the dial from above or up from beneath. The difference between cometary and planetary orbits is thus made plain, for the inferior planets, Venus and Mercury, would occupy circles within that traversed by the earth, and Mars, the asteroids, Jupiter, Saturn, Uranus and Neptune would revolve in outer circles, requiring a vastly larger dial. Of course, it will be understood that the planetary orbits are really ellipses, and that they are also more or less "inclined" to the plane of the earth's orbit.

Comets are literally "bearded bodies" or "hairy stars," having been thus named because of the delicately shining haze which distinguishes them. They may or may not have a "tail," which is popularly termed the "star," and which is sometimes double. The "nucleus" and the "coma" (the hazy cloud) together constitute the head. The curious fan-shaped train or "tail" may be conspicuous only in its absence, or it may be divided into several streamers, as in the case of the comet of 1744, which had six tails. There are persons whose nightly hours are entirely given to the search for comets, and every cloudy patch which appears in the wide field of the "comet-seeker" is closely scrutinized and compared with sky charts to make sure that it is not a nebula. If, after a few hours' observation, it is found to have changed its position, he never so slightly, it is quickly heralded as the advent of a new comet, the Warner prize of \$100 probably accelerating both the search and the announcement.

Comets are doubtless numbered by myriads, and 500 have been visible to the naked eye during the Christian era, says a writer in the Philadelphia Ledger.

The comet of B. C. 43 was regarded by the Romans as sent by heaven to convey the spirit of the lately assassinated Julius Caesar to the skies. In 1456 universal terror was inspired by appearance in the sky of a magnificent visitor. As the Turks were sweeping all before them and the Crescent was thus in the ascendant, the alarm of Christendom was heightened by what was thought to be a celestial token of evil. The house of the comet of 1850, which Newton proved was governed by solar gravitation, measured 600,000 miles in diameter, while that of its brilliant successor of 1811 was about twice as great, and measured a greater than the diameter of the sun.

The train of the latter—120,000,000 miles long—extended from the horizon to the zenith, and it was visible for seventeen months. It is rather a rare commentary upon the possible range of even scientific men that Whiston, the friend of the illustrious Newton, and his successor in the Lucasian professorship, attributed the Deluge to this comet's influence, and upon comets in general as the abodes of lost souls! "Perhaps it is well that the lately announced comets are so small and unimportant as not to attract popular attention, else, in the present slightly strained relations of the American eagle and the British lion, they might be regarded as ominous of war, as was the comet of 1811, just previous to the last trouble with the mother country."

Halley's comet of 1835, named for the eminent astronomer who first predicted a comet's return, has a period of 75 years, and will be due again in 1911 or 1912.

The "great comet of 1843" is ranked among the most impressive of the catalogue of almost grazing stars. One of the very finest of the comets bears the name of Donati, and belongs to the year 1858. It is well that an unusual opportunity for its study was had, for it is not expected to return for about 2,000 years.

Doubtless many readers of these lines remember the superb spectacle of 1883, when the heavens were glorified with the insignia of cometic majesty. This comet of our own times was so brilliant that it was observed in broad daylight when within two degrees of the sun by one who had not heard of its discovery. It made an actual transit of the sun, being followed to the very limb, but during the transit it was invisible because of its transparency. It would have been still more imposing had its position been favorable, for its train measured 100,000,000 miles. We may not hope to welcome it again for more than 700 years. A comparison of observations of this comet with those of the comets of 1663, 1843, and 1880 reveals the proba-

bility that they compose a "comet family," for their perihelia are very similar. There are indications that there are other "families" or "groups" of these bodies.

Biele's comet, with a period of six and six-tenths years, discovered in 1828, broke in two in distance, and the twins, gradually separating in distance, were 1,500,000 miles apart at their next appearance, but they have never been seen since, although scheduled for a half dozen returns. But in 1872, when the earth passed for "junction" of her orbit with that of "Biele," she received a baptism of fire in the form of a remarkable reign of meteors. This significant hint was not lost upon astronomers, and has resulted in such identification of the orbit of certain comets and meteor groups, that there are few students who do not concede the intimate relationship between these hitherto distinctly classified celestial phenomena, and some meteor groups are plainly pronounced to be "disintegrated" comets.

There are many difficulties in the theory of the constitution of comets. Both their spectra and their trains group them into several types, in which hydrogen, hydro-carbon, gas or iron vapor is prominent. Tycho Brahe supposed the tails to be produced by the sun's rays, the "transmitted" through the nucleus, which was thus invested with the qualities of a lens. Kepler looked upon them as the atmosphere of the comet driven off by the sun's rays. Newton regarded them as a thin vapor rising from the heated nucleus, and other thinkers have conceived them to be electric streams.

It is certain that the "airy nothing" although not compressible into the narrow quarters of the "pill boxes" exaggeratedly assumed to be able to entertain them, are nevertheless a density far below that of what we are accustomed to call a vacuum. The mysterious peripatetic train of the tail from the sun is presumed to be due to electrical repulsion by that great luminary. And the matter expelled from the comet's head, and repelled by the sun, seems to assume the structure of a hollow, fibrous fibre, through which the smallest star may be seen, which may either be dissipated in space or attracted by bodies in whose vicinity it may chance to be. Quite a number of comets now owe allegiance to the planets, having been "captured" by them, perhaps, as the result of long and gradually exercised gravitational influence.

And whether they are, as Newcomb conceives, "stray fragments of the original nebulous matter scattered through the great wilderness of space," or, according to Proctor, "masses of matter thrown off by eruptions from sun or star or planet," it seems probable that Proctor's hypothesis is tenable, i. e., that they are "sandbanks" of collections of well-separated solid particles, each surrounded by an envelope of gas, and that the mysterious train is a "steaming" away into space of the volatile matter stored up in the marvellous treasures of the head under the, and partly reflecting, the sunshine.

## PEARLS FOUND IN SCOTIA.

One From Aberdeenshire Said to Form One of the Queen's Jewels.

One is so much accustomed to associate pearls with the eastern and gold with the southwestern countries of the world that the discovery of pearls in Scotland and gold in Wales seems somewhat opposed to the order of things. That gold exists in Wales is, of course, quite a recent discovery, and the small and unprofitable quantities found have now resulted in the abandonment of the mining operations commenced by Richard Morgan.

But the pearls of Scotland have quite a different history. For centuries pearls have been found in the River Ythan, in Aberdeenshire, and only last year an Aberdeenshire man made some notable hauls, which he disposed of to jewelers of the northern towns. It was recently stated in a London paper that a pearl taken from the River Ythan is believed to form one of the Queen's crown jewels. It is to be hoped that the belief is well founded, for in that case it may be reasonably claimed that the precious stone in question is the only one contributed to the crown jewels, a thought calculated to gratify our national pride, for Scotland might be worse represented than by a pearl in the national regalia.

A story is told of an Aberdeenshire farmer who found a very large and perfect pearl in the shell of a mussel taken from the Ythan. Happening to visit London some time afterward, he displayed his treasure to a west end jeweler, who, struck with the size and beauty of the pearl, offered the price. The farmer demanded what possibly he regarded as a big price, viz., £100. Now this was in the days when Scotland had her own coinage, and a pound (Scots) was equivalent to £84, so that the £100 he asked would only have represented £84 6s 8d English money.

His surprise and delight may be imagined therefore when he received for his pearl £100 sterling. It is doubtful, however, whether the English jeweler would have shared these feelings had he known the exact meaning of the "humerous pun" demanded by the owner of the pearl. However, he had no occasion to complain, for he is said to have sold the gem subsequently at a large profit.—Scottish American.

## The Rights of Husbands.

It is a divine privilege to be head of a family, and a man has no right to abuse that privilege.

He has no right to ill-use or neglect the wife, who took him "for better or worse."

He has no right to scold and terrify his children.

He has no right to quarrel with his daughter-in-law.

He has no right to expect a game dinner from a kidney stew allowance.

He has no right to give his wife \$2 a week pin money and expect her to pay the gas bill and keep herself and the children well dressed.

He has no right to scold his good manners and good humor for company.

He has no right to come home with a hatchet cast of countenance and the little unfortunates who call him father.

He has a right to remember that he owes his family everything, and that to deserve the respect and love of his boys and girls and the consideration and loyalty of his wife is glory enough for any man.—New York World.