



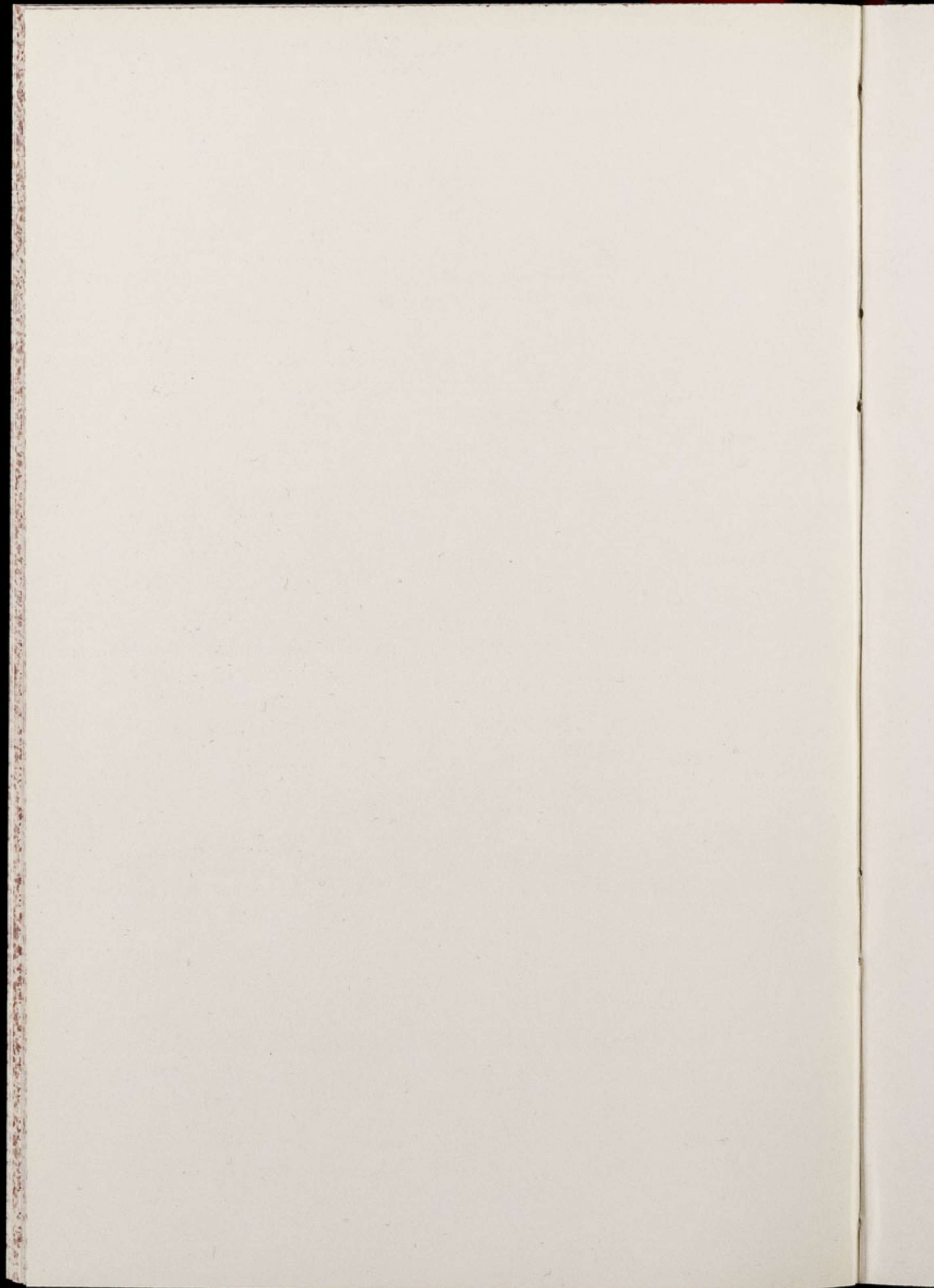
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Chester Zoo News

THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS, UPTON - BY - CHESTER

April, 1963

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Introduction

With the severe winter behind us there is a new atmosphere in the Zoo. Building work is going ahead at a tremendous pace and the first snowdrops and crocuses are showing in the Gardens. The animals are in high spirits as any visitor will know who has watched the antics of the Chimpanzees or Sammy and his family of Sea Lions.

Many readers will have seen something of Chester Zoo on television in recent weeks, thanks to George the Giraffe's incurable interest in telephone wires. One amused viewer suggested that we provide George with his own private telephone extension!

An interesting birth during March was that of a baby Grey Duiker. The baby, a female, has been named Daisy and is on show in the Camel House.

For the photographs and illustration included in this issue of the magazine, our thanks go to:—

E. Kirkland, Esq.

M. D. Murphy, Esq.

Mr. and Mrs. E. Sorby.

G. F. Williams, Esq.

COVER: Our Cover Picture this month shows Sammy's son and three of the four female Sea Lions enjoying the Spring sunshine.

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ELEPHANT NOTES

We have six elephants at Chester, three Asiatic and three African, all of which mix freely and remain completely unfettered both day and night.

"Barbar" the big Asiatic Elephant is the oldest resident. She is about thirty years old and came to Chester from Whipnade Park in 1949. She rules the roost like a matron in a hospital and even the African Bull Elephants treat her with the greatest respect. When our two youngest animals — "Sally" and "Judy" — arrived from Bangkok in 1961, she mothered them with touching affection. Whenever they were frightened they raced to hide behind her ungainly bulk. They were often very naughty and would run at the African Bulls, giving them a hard push from behind and quickly dodging back to the safety of Barbar.

Sally is the taller of the two young Asiatic elephants and is full of fun. She spends hours walking along the edge of the moat around the Elephant paddock, as if enjoying the act of balancing. She is a great pet of her Keeper and appreciates being played with, when time permits.

The two African Bull Elephants came from East Africa in July, 1955. "Rascal" was slightly larger than "Bobo" and had almost broken out of his crate when he arrived at the Zoo. In spite of his high spirits, however, Kay (our Elephant Keeper) soon had him under control. Both animals were placed in what was then the old Rhino House and soon became great favourites with visitors. They grew very fast, Rascal always keeping ahead of Bobo in size, so that he is now well over eighteen inches taller at the shoulder.

Like all Elephants the two young bulls soon learned to beg food from visitors and it was exceedingly difficult to enforce our strict "NO FEEDING" rule, as they were so appealing. Frustrated at not getting many tit-bits, they began to watch for opportunities to steal objects such as coats and cameras. One day Rascal spied a leather case resting on the wall and grabbed it. The case contained twelve prayer books and was the property of a Priest, who was escorting a Sunday School Party round the Zoo. Before the Priest

could find a Keeper, Rascal had eaten his way through the lot, leather case and all! The Priest was more worried over Rascal's possible tummy-ache than the fate of the actual books. Fortunately, Rascal digested them inwardly without difficulty.

It was only a matter of time before both these young Elephants outgrew their first home and the sight of their trunks spiralling upwards through a hole they had made in the roof, confirmed the opinion that they would have to be rehoused.

Bobo has many amusing habits and one of his most frequent tricks is to get to the head of the queue for his nightly loaf of bread, stuffing the loaf hurriedly in his mouth and doubling down the line to the bottom of the queue — ever hopeful that one day his Keeper might overlook the first loaf and hand him a second.



G. F. Williams.

"BARBAR" AND A YOUNG ADMIRER

Our female African Elephant, "Sheila," was the last of the group to arrive. She is a particularly friendly animal, and, on her arrival in February, 1962, was immediately accepted by the other Elephants. Sheila is about thirteen years old. Bobo "fell" for her from the start and they have been firm friends ever since.

Recently our Elephant Keeper was ill and all the Elephants were most upset at his absence. When he returned they gave him

a tremendous welcome, almost blowing the roof off the Pachyderm House with their trumpeting.

Elephants are particularly loyal animals, especially to each other and it has been known for a wounded Elephant in the wild to be lifted up bodily by two other Elephants and, with one on either side, assisted back to the safety of the bush.

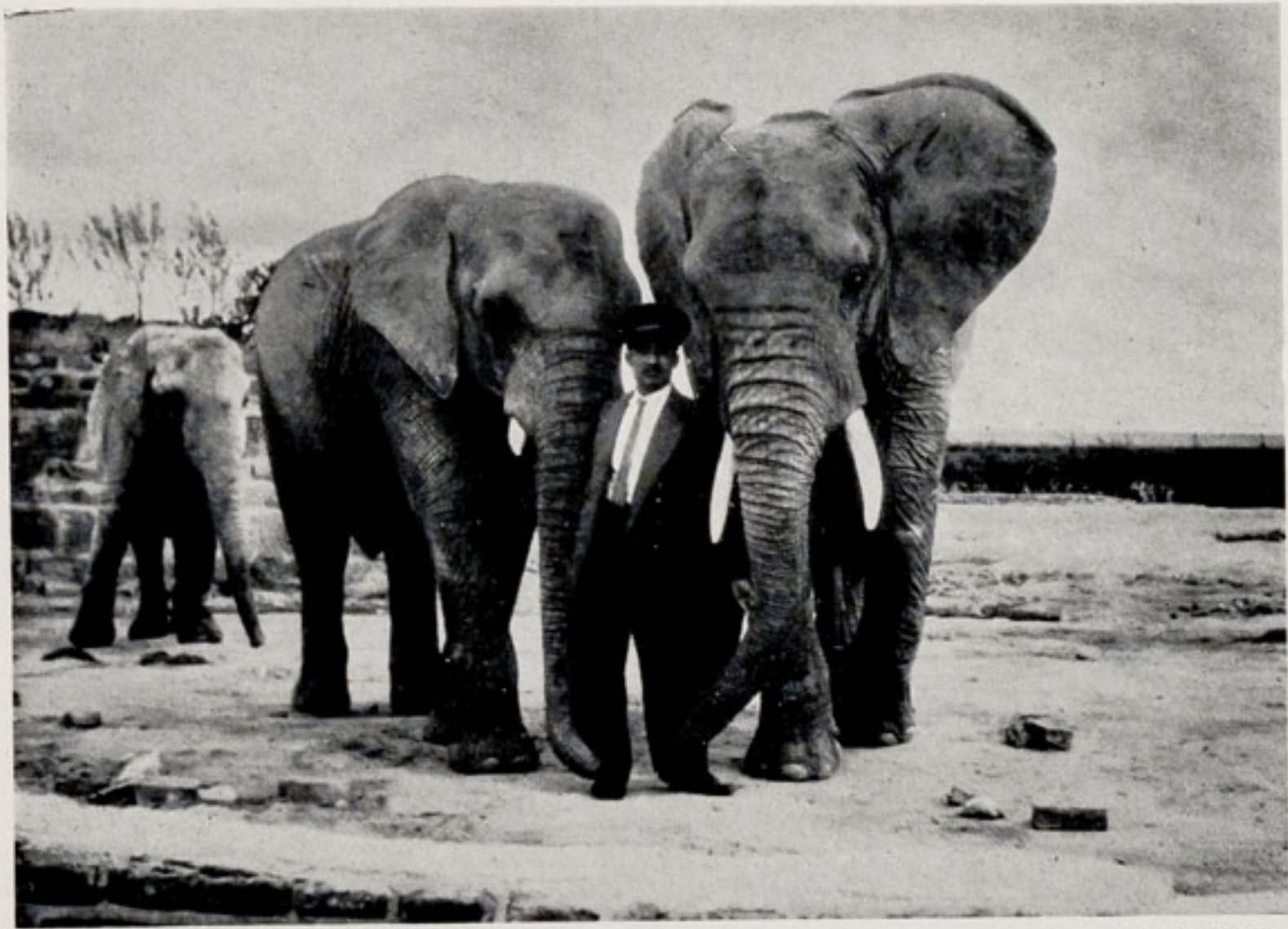
The Asiatic Elephant inhabits the south east part of Asia, including the islands of Sumatra, Borneo and Ceylon and vast numbers of them are domesticated and used extensively for pioneering and forestry activities.

In Africa, Elephants travel about in herds; sometimes hundreds of animals can be seen together and such large herds are often responsible for terrible destruction in forest areas. They leave a trail of devastation in their wake. A very large part of their diet consists of the young branches of trees, particularly Acacia trees. Sometimes the Elephants can be seen standing on their hind legs to gain extra height to reach the topmost branches; at other times they push over even large trees in order to eat the fresh growth at the top.

The Elephants track over vast areas in search of food and although they are known to be highly intelligent animals they can also do the oddest things. When, for instance, the Lorian Swamp, in the Northern Frontier District of Kenya, dried up and part of the Uaso Nyiro river which runs into the swamp also became dry, many Elephants died of thirst, when all they had to do was walk under thirty miles down the river bed to find the water they needed so badly. Elephants are very good climbers and can go up steep mountainsides with agility.

African Elephants are, on the whole, much bigger than the Asiatic. The former grow to as much as eleven feet four inches at the shoulder, whereas the maximum height of an Asiatic Elephant is from nine to ten feet at the shoulder. There are some races in the forest areas of Africa which are known to be smaller in size than those found in the open bush.

The ears of the African Elephant are their most striking characteristic. They are enormous and when in repose, completely cover



G. F. Williams.

"SHEILA," "BOBO" AND "RASCAL" WITH KAY

the shoulders. When the animals become agitated in any way, the ears are raised at right angles to the head and present a frightening appearance.

The tusks, or ivory, of an African Elephant are frequently ten feet in length and can weigh as much as 170 lbs. each. The record is eleven feet five inches long with a weight of 226 lbs. The tusks of the Asiatic Elephant are smaller and lighter, but good ones can reach six feet and weigh up to 100 lbs.

There is a variation in the trunks of the two different species. The upper part of the tip of the Asiatic Elephants trunk is extended to form a prehensile "finger," whereas with the African both the upper and lower parts of the tip of the trunk are very flexible, but not extended in the same manner.

Asiatic Elephants are those most commonly seen in zoos; Bull Elephants of either species are rarely exhibited. We have two African Bull Elephants at Chester, which are probably the only two in this country.

PLANTS IN THE PACHYDERM HOUSE

This House was planted in the spring of 1961 with a variety of tropical and sub-tropical plants, which had been raised in our Greenhouses.

Above the back wall of the main part of the building, which is occupied by the Elephants, a border was made for permanent planting. This is the warmest part of the House, being immediately above the hot air ducts which provide the heating for the House.

Here we planted tropical plants — *Kentia* palms, *Crotons* in variety, *Xanthosoma*, *Sanchezia nobilis variegata*, etc., all tall-growing plants, to provide the background of the border. The front edge was planted with *Pilea cardeirii*, *Pilea grandis*, *Vinca rosea*, *Tradescantias*, *Asparagus sprengeri* ferns, etc.

To give added colour for the summer months *Canna* lilies in different colours are planted each spring — these also add to the tropical effect of the planting. *Ipomæa* (morning glory) is also planted each spring to climb up the roof-supporting pillars. This lovely climber is always well covered with its pale blue flowers, although each flower has a life of only one day. Many of our visitors last year thought that these flowers were artificial and expressed surprise that we should use them. We would have thought them much too delicate to be mistaken in this way. They are, of course, too far away from the public passageway for visitors to get a close look at the flowers.

A further border runs the full length of the public passageway in this House. Being cooler here, it is the place for sub-tropical plants and climbers, although a thermometer placed in this border has never fallen below 50° Fahrenheit through all the severe frost of this winter. This proves just how effective is the heating in the Pachyderm House.

It would be impossible to mention all the interesting subjects in this border in detail. The Avocado pear is worth its place for its lovely foliage, although we do not expect fruit from it. *Eriobotrya japonica* is a tender evergreen flowering shrub, which bears the edible loquat fruit. *Citrus lemonii* (lemon) has not fruited in this position yet, but we see no reason why it should not do so this year. *Datura suaveolens*, *Cassia corymbosa*, *Lippia citriodora* (the lemon-scented verbena), *Reinwardtia tetragyna*, *Psidium catlerianum*, *Clivia miniata* (now showing its lovely clusters of lily-like flowers), *Pitcarnea flava*, *Maranta leuconeura*, *Hedychium gard-*



G. F. Williams.

"JUDY" AND "SALLY" WITH THE TROPICAL PLANT BORDER IN THE BACKGROUND

nerianium, *Cyperus alternifolius* and *Daphne odora* are all planted in the border. One plant which we have not mentioned is *Aspidistra elatior*. It was once almost the only house plant, but is out of favour now that so many other plants prove to be suitable for house decoration, which we once thought could only be grown satisfactorily in greenhouse conditions.

A number of climbers adorn the back of the border including *Tibouchina semidecandra* — a real treasure this with its clusters of blue flowers. It is very free flowering, being in bloom all the summer and well into the winter, the individual flowers, like those of *Ipomæa*, lasting for only one day. We have specimens of both blue and white varieties of *Plumbago capensis*. Another climber — *Jacaranda acutifolia* — we are hoping will flower this year being now well established. The red-flowered *Abutilon agathea* is planted at the far end of the border, with *Abutilon megapotanicum* close to it. *Cestrum newelii* (red) and *aurantiacum* (yellow) can also be seen here.

This border is also planted with *Canna* lilies for summer flowering and various tall subjects such as *Campanula pyramidalis*, *Lilium auratum*, *Shizanthus*, etc., are grown in the greenhouses and placed in the border when they are in flower, to add extra colour. You can read about some of the other plants in the *Pachyderm House* in our next issue.

WOLVERINE NOTES

Wolverines, or Gluttons as they are also called, are the largest members of the Weasel family. Our pair of Wolverines arrived from Helsinki Zoo in December, 1958 and are now approximately six years old. The male is some three feet long in the body and the female slightly smaller.

Wolverines inhabit a broad region in the northern parts of both the Eastern and Western Hemispheres, although in earlier times they were common over a much wider area. Fossilized remains have been found in Derbyshire and parts of Wales.

They are heavy, rather clumsily built animals with a powerful head and small ears. The skull is broad and the nose short and pointed. Wolverines have a thick-set body which is heavily furred, as are the short legs — the tail too is comparatively short and bushy. It is customary for both the head and tail of the animal to be carried low, so that the back has a somewhat arched appearance. Fur colouration varies quite a bit, but the two we have in the Zoo are a rich dark brown. The long curved claws of the animal are pale in colour and used both for climbing and digging for food.

The clumsy appearance of the Wolverine is deceptive for, not only can they move at a fair speed, but they can also climb trees with ease if the need arises. When engaged in chasing prey they can jump and dodge with considerable agility. So great is their strength and fearlessness that even big Cats and Bears avoid attacking Wolverines, and their only real enemy is Man.

As the name Glutton suggests, they possess a remarkably voracious appetite and have a reputation for making short work of any animal they are able to catch and overpower. Once their initial hunger is satisfied, the remainder of the meal is buried for a future occasion.

Wolverines are much hated by fur trappers for, once a Wolverine discovers a line of traps, it will visit the line regularly, pulling the traps apart to consume the marten, ermine or mink, etc., that may be captive. Until the Wolverine itself has been trapped or killed, there is no hope of the trapper profiting from his labours.



Mr. & Mrs. E. Sorby.

WOLVERINE

Despite living in cold climates the Wolverine does not hibernate. It spends its sleeping hours in rock crevices or in underground holes, probably choosing a deserted Bear den for daily use, but selecting a subterranean burrow for breeding purposes. Wolverines are confined mostly to forest areas and are essentially nocturnal in habit. These are usually solitary animals (although sometimes found in pairs), except in the case of a family group, when a female may have as many as four or five youngsters with her.

Considering their natural fierceness and somewhat anti-social activities in the wild, Wolverines learn to accept captivity with surprising docility. They seem to bear no resentment at being confined and are willing to work off their bouts of indefatigable energy in normal exercise and playful toughness towards each other. Our Wolverines are very tame, particularly the female which will feed from her Keeper's hand.

THE COCKS OF THE ROCK

These lovely South American birds, the size of a pigeon, belong to the family called Cotingidæ, of which there are about ninety species. There are two species of Cocks of the Rock, *Rupicola rupicola* and *Rupicola peruviana*, the Orange and Scarlet Cock of the Rock respectively. Both species are represented in the Chester Zoo collection.

To describe first of all the Orange — in the cock bird the plumage is a bright orange with black flight feathers. These feathers do not show up, however, when the bird is at rest, being concealed by the curious wispy fringes, which occur at the ends of the feathers of the back. Over the head is a semi-circular crest which so nearly conceals the beak that one has to look twice to see it. The hens plumage and that of young cocks is a uniform warm brown and the hens crest is somewhat smaller. We have at the present time two Orange cocks, but no hen.

The colouring of the Scarlet Cock of the Rock is very different, though the shape and the crest are similar to those of the Orange. The colour is a bright scarlet and the black wings are not concealed by the curious fringes found in the Orange species. The back is covered with a "shawl" of bright grey. It is a matter of opinion which is the more beautiful species, but most people will find the contrasting of red, black and grey in the Scarlet Cock of the Rock even more delightful than the more uniform colour of the Orange. As with the Orange species, the hens and young cocks are brown in colour. At Chester we have one male specimen of the Scarlet Cock of the Rock.

The Orange Cock of the Rock is found in the Amazonian region, the Guianas, Southern Venezuela and Northern Brazil, whereas the Scarlet inhabits the western slopes of the Andes in



E. Kirkland.

ORANGE COCK OF THE ROCK

Ecuador and Columbia. Both species are largely fruit eaters, although numbers of insects are also eaten. In the wild they are suspected of taking the eggs and nestlings of smaller birds.

A curious feature of Cocks of the Rock is their communal dance-display. Up to about twenty will gather in a tree and one by one will fly to the ground, where each goes through a dancing and jumping routine until exhausted, when another bird takes its place. Some observers have stated that both sexes take part in these displays, whilst others disagree, being of the opinion that only the males do so — the brown birds seen being immature cocks.

AQUARIUM NEWS

During the latter half of February and the beginning of March, the Aquarium has been the scene of a great upheaval. The usually peaceful atmosphere erupted into something reminiscent of a factory, with the arrival of the Zoo's Works and Maintenance departments, bent on renovating the entire building. This is the time of the year when the Aquarium has its annual "face lift" and this year it was decided that, not only should the building be repainted, but that several improvements should be added to ensure that the Aquarium would run even more efficiently.

After considerable thought, it was decided that the inside walls and ceiling of the building should be painted deep blue, whilst the pillars supporting the roof, together with several other walls, should be painted light grey. As an experiment, one of the many sky lights in the passages was given one coat of blue paint and replaced in its surround. This had the desired effect of darkening the public passage and giving it a blue aquarium-like atmosphere. So pleasing was the effect that nearly all the sky lights in the building were painted blue. Finally the raised surrounds of the tanks, which are

rather like deep picture frames, have been painted matt black. The entire building has now taken on a very pleasing atmosphere and the contrasting black surrounds have had the effect of accentuating the brightly lit tanks and their exotic occupants.

Before any of this painting could be undertaken successfully, however, a method of drying out the entire building had to be found. Fortunately a large and very powerful heating fan had just been purchased with the intention of fitting it into one of the new buildings being erected in the Gardens. This was commandeered for a week and trundled up and down the passages of the Aquarium, drying out an enormous area of wall in a very short time. An amusing side effect of the use of this heater was that many chilled members of the public who came into the Aquarium, seemed to find the tanks immediately adjacent to it of extreme interest. It was hard to tell whether they were genuinely interested in the fish, or just keeping warm.

Whilst the painters have been occupied in the public part of the building, members of the Works Department have been laying new floors, replacing almost the entire glass roof over the cold water section and installing a new air compressor, which is by far the most important project underway in the Aquarium at the moment. The entire collection depends on this machine for its very life. Without this running perfectly, the general health and appearance of the collection would deteriorate rapidly. Therefore, it is not surprising that a great deal of thought has to be given to the problem, before the original compressor is removed and the new one installed permanently.

A new salt water reserve tank has been built on the roof of the Aquarium. It will allow a great deal of expansion in our marine

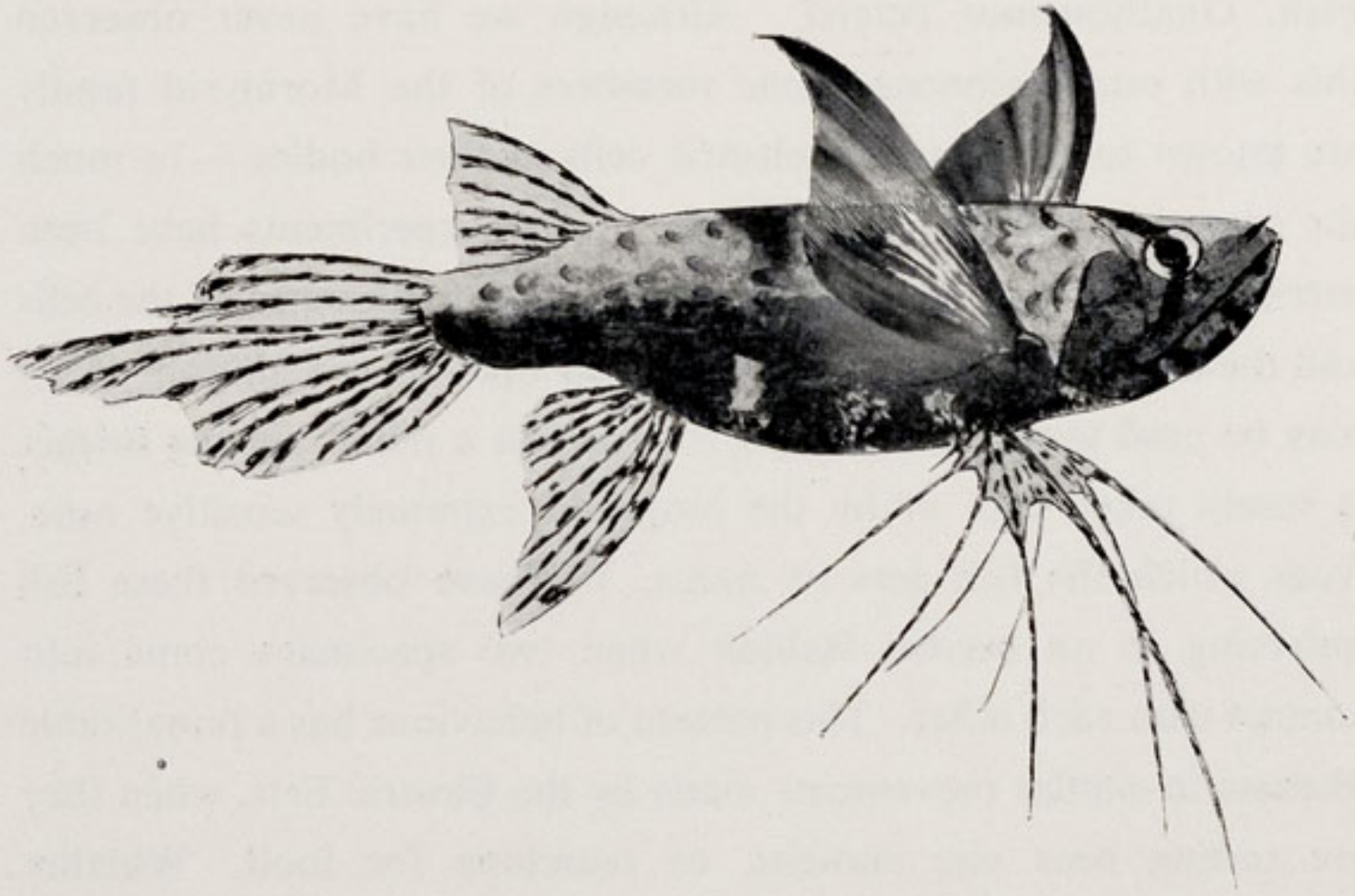
section, at present reduced to one tank. This tank contains some of the latest additions to the collection.

It will be seen from the above account that the entire Aquarium has been improved in many ways. Now work will commence on the individual tanks; cleaning them out, re-organising the tropical plants and, if necessary, reducing the number of fish where successful breeding has caused overcrowding.

The following interesting fish have been added to the collection:— Puffer Fish, Elephant Trunk-nosed Fish, Butterfly Fish, Chinese Flying Fish, Red-tailed Black Sharks, Kribensis, Penguins, Scissor-tails and Harlequins. Several small Cichlids have also been obtained but, because of their size, it is rather difficult to tell their exact species. We think, however, that they are probably Jack Dempseys.

This new collection, numbering eighty-nine individual specimens contains some of the most unusual fish to be seen in the Aquarium in recent months. The Puffer Fish are some of these. There are many varieties of Puffer Fish, all of which are found in tropical areas where the seas rarely grow cooler than seventy degrees. Included in this group are a few varieties which live in either pure freshwater or brackish water. Our Puffer Fish, *Tetrodon fluviatilis*, belong to these latter varieties. They are to be found in many river estuaries around the shores of the Indian Ocean and the Philippine Islands where the density of salt water fluctuates constantly, with the rise and fall of the rivers and the tides and currents of the Ocean. Consequently these fish prove to be quite hardy and have lost no time in establishing themselves in their tank.

On arrival our six specimens were examined carefully before being released into their tank. After an hour had elapsed, a piece



M. D. Murphy.

BUTTERFLY FISH

of raw heart was suspended in the water and to our amazement, all six Puffers set to and demolished a large proportion of the meat in a very short time. These are surely some of the toughest fish we have had and cause a lot of amusement when being transferred in a net or frightened in any other way. As their name implies, they are capable of inflating their bodies to at least twice their original size, when in a difficult situation. If they are placed in the water when inflated, they will float for a short time on the surface before deflating themselves, to the accompaniment of a series of rather rude noises. One can imagine the feelings of some unsuspecting fish which, after attacking a Puffer, is confronted with an object twice as large and invariably covered in spines, which beats a hasty retreat to the nearest cover and adds insult to injury by emitting a series of irregular "raspberries." We are glad to say that our Puffers have settled down to a peaceful, food-filled life in the Aquarium, where their antics prove more amusing every day.

Another very interesting arrival is the Elephant Trunk-nosed Fish, *Gnathonemus petersi*. Although we have never observed this with our specimens, some members of the Mormyrid family are known to have built-in electric cells in their bodies — in much the same way as the Electric Eel. A few experiments have been carried out on these fish but the reason for the presence of the cells and the use to which they are put is still open to speculation. They may be used to aid in searching for food or a mate, but the former is surely taken care of by the long and extremely sensitive nose, from which the fish gets its name. We have observed these fish quivering in an excited fashion when two specimens come into contact with each other. This pattern of behaviour has a remarkable likeness to similar movements made by the Electric Eels, when they are resting near one another, or searching for food. Whether there is any connection or not, it is difficult to tell. There is certainly an interesting field of research open to anyone with the time and facilities.

Although in these articles the tropical fish section is discussed in some detail, it must be borne in mind that we also house a collection of cold water fish, such as Goldfish, Shubunkins and other more fancy varieties of Carp. We also have a number of coarse fish, which are to be found in most ponds or streams in England, such fish as Rudd, Tench, Perch, Pike, Minnows and many more are on show as they become available. The one representative of game fish which we have at the moment is a Rainbow Trout.

STOP PRESS

Born just in time to catch this issue of our magazine, a Pere David Deer. As yet we do not know the sex of the baby.

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