HENRY BISHOP'S ADVICE TO HIS PATRONS

On the Care and General Management of the AQUARIUM.

The study of any of Nature's works is one of the most ennobling pursuits that can engage the attention of man kind. It is a pursuit in which we can all engage to a certain extent by having about us pets, such as birds, pet animals and aquaria.

Reader, if you think you do not care for such companions try the experiment: get something in your household in the way of pets, begin to study their peculiarities and you will find the care of them a most pleasing occupation. At first you will probably not take much interest, but gradually you will become attached to your pets. You will in time look at them the first thing in the morning and the last thing at night. See, too, how your children will be pleased when you bring them home.

The study of pets, no matter in which form, tends to elevate the soul of man from the wearisome pursuits of every-day life. Nothing gives more satisfaction as a study in our homes than the aquarium. A well regulated aquarium may be looked upon as a little world. It has no communication with the great world in which it is exists, and of which it forms a part, but still its inhabitants live and prosper.

In an aquarium you have the vegetable and animal kingdom combined. The aquarium serves to illustrate the fact that animals cannot live without plants, and plants cannot exist without animals. Plants inhale carbon and exhale oxygen; animals do the reverse. If you put fish in a vessel without supplying plants they will not live long in the same water. And, on the other hand, if you put plants in pure fresh water without supplying animal life they will soon decay.

Now, our object in combining the carbon and oxygen supplying powers in the aquarium is to have the two evenly balanced. We must furnish our aquarium with the proper kind and quantity of water plants to supply oxygen and sustain the animal life, but we must be careful not to add any more oxygen inhalers that the plants can supply. If we overcrowd our aquarium one way or the other it will result in the destruction of both fish and plants. I find that inexperienced aquarists will, in nine cases out of ten, overcrowd their aquarium with animal life.

The aquarium affords a wide opportunity for the study of Nature's works, and from the fresh water collections we may extend our study to the marine aquarium.
Having brought the fresh water aquaria to great perfection, I intend, at an early day to commence with the more troublesome, but at the same time more interesting marine aquaria. An aquarium is an exceedingly useful and beautiful ornament, it suits everywhere parlor, library, sitting room dining room, and may indeed be introduced with benefit in the apartment of the sick. An invalid whom the shrill song of a pet bird would annoy, will watch with delight the motions of animal life in an aquarium. In a sick room an aquarium will absorb impure air and moisten dry heat. It is health-sustaining and highly recommended by physicians. Aquaria may be appropriately introduced in from the humblest cottage to the palaces of kings and emperors.

I have heard men engaged in my line of business say: “It is no use to teach people too much,” “they will get too smart,” and other remarks of a similar import. I differ with them however. It is my wish that my patrons know as much about the treatment of their pets as I do. To those who are fond of pets I am constantly anxious to give all the advice I possibly can out of my ten years experience. I often regret when persons come to me that I cannot give them all the information required.

Fish, like all other living beings, are subject to diseases, the must disastrous of which is the fungus. The common minnow is more subject to it than any other species I know of. It shows itself in this way: a white downy spot appears on some part of the body, generally, at first, near the tail. Whenever you are a fish thus affected in your aquarium, eject and destroy it at once, for it will not get well. This disease will sometimes become epidemic and all fish are subject to it. Through its ravages in our occasion I lost 450 goldfish in a period of 14 days. I know of no remedy for the fungus and I doubt if it can ever be remedied or avoided.

For the last three years I have given very close attention to improving parlor aquaria and towards beautifying and simplifying them. I have done as much if not more, than any other dealer here or elsewhere. When I came to Baltimore from New York, I found that aquaria, as part of household luxury or ornament, had never been properly introduced. This was probably for the reason that no one had ever given the matter close attention, or that those who had lacked the necessary knowledge and perseverance. I went to work with a will, it being my determination to introduce aquaria or at least give it a fair trial. I am one of those who (as the old saying is) will “never give up the ship” I met with very little success at first. For two years I invested more in advertising aquaria than the profits amounted to. With all this, however, I did not become discouraged. I went on improving the aquaria in every way, style, simplicity and prices, and thanks to a generous public, I take pleasure in saying that my labor and perseverance are beginning to be crowned with success.

Aquaria are commencing to go. Busy fathers buy them for the amusement of their wives and children; bachelors buy them for pastime and study; young men buy them for their sweethearts; charitable men buy and send them to fairs to be sold and the money contributed to some good
cause. They are being bought for wedding and birthday presents, for sick rooms, parlors, libraries
and sitting rooms. Store-keepers use them as attractions for their show windows, and they are being
met with here, there and everywhere.

People who had aquaria years ago and did not know how to manage them, became discouraged
and stored them away in their garrets and general curiosity rooms. They now bring them forth
again, have them painted, and come to me for advice with a view of trying them once more. After I
replenish them their owners are pleased and only sorry they did not know as much years ago.

We must all creep before we walk. My store is not large, but I hope to make improvements in this
respect before long. I am prepared, nevertheless, to meet the wants of all—millionaires, bankers,
doctors, lawyers, merchants, tradesmen, aye, even the humblest laborer, who can buy for the
amusement of his wife and children a two gallon globe, thick glass, with heavy brass chain and two
fish, all for one dollar! This is something never before offered for the same price, here or elsewhere.
I have aquaria in stock at prices from $1 to $40, and am prepared to supply at short notice still more
expensive cases, if wanted.

I arrange them so that they will stand from one to six months, according to capacity, without change
of water. They are now (with the new improvements) very simply and easily attended to.

As a proof of my success I give here a few certificates from some of our most prominent citizens:

We have one of Mr. Bishop's aquariums in our office and find that it will keep the water fresh for at
least two months.

BOWEN & MERCER, 72 Exchange Place, Baltimore.

Mr. Henry Bishop arranged my aquarium about the latter part of June, with plants, etc., and it
remained without requiring attention from him till the following December.

January 15, 1878 ALAN P. SMITH, M. D.

I have for ten years taken great interest in Parlor Fish Culture and have at present one of Bishops's
large Bell Tank Aquariums in each of my offices, each of which contains no less than these dozen
fish, various species. I find no necessity to changes the water more frequently than once in three
months.

January 17, 1878. JOS. BENZINGER, M. D.
I take pleasure in stating, from my experience with Mr. Bishop, that any one in want of a first-class Aquarium can hardly better themselves by any other advice. He furnished mine holding twenty-five gallons, and I have not been compelled to change the water or plants for eight or ten weeks.

January 17, 1878. C. S. BROWN, 474 Eutaw Place.

Baltimore, January 16th, 1878.

I have in my gallery one of Mr. Henry Bishop's Bell Tank Aquariums, which has stood two months without change of water and the fish are doing well. SHOREY, 157 W. Baltimore street.

I have one of Mr. Bishop's large aquariums. The first time he arranged it for me it stood four months without changing water, and several times since I have let it stand longer.

MARION C. MORDECAI.

Mr. Henry Bishop pushed in any after window, for the exhibition one of the beautiful Bell Tank Aquariums on the first of September, and left it without change of water or other attention for three months. He then thoroughly cleaned it, again using the same plants, and now at the present time it has again stood six weeks without change of water. During the four months and a half only one fish died. A two (2) gallon globe has now been standing in my window for six weeks without change of water, and fish and plants are doing well. WM. McGUIRE, 74 West Baltimore street, near Gay street.

Baltimore, January 21, 1878.

If space permitted I could give many more certificates of a similarly gratifying character. It is hard to convince inexperienced aquarists that an aquarium will stand from one to six months without change of water, and the fish continue to live and be healthy. I trust, however, that the above statements will convince the most sceptical.

The management of aquaria is, like everything else, very simple when you know how. The main secret is to introduce the proper plants, that is, plants which will liberate oxygen freely, thus purifying the water. Nothing is more beautiful than an aquarium in good order, well supplied with vegetables and animal Life. The variety of colors displayed in the vegetation together with the motion of animal life in an aquarium form a picture worthy of admiration.
I have always on hand a variety of water plants, such as are best adapted in the different seasons of the year. The following names are the best aquarium plants of the many varieties found on the American continent:

Valisnaria Spiralis Blade Plant.

Utricularia Vulgaris Bladderwort.

Myriophyllum Spicatum Spiked Water Millfoil.

Ceratophyllum Demersum Mare's Tail.

Callitriche Verna Water Star.

Ranunculus Fluviatilis River Crowfoot.

Veronica Americana American Brooklime.

Veronica Anagalis Water Speedwell.

Different Varieties of the Anacharis Genus, etc., etc.

Water plants come in bunches.

The plants here named are all soft weeds and only grow under, or swimming upon the surface of the water. For a centre, elevated ornamental plant I have ever in stock the “Umbrella” plant, or Cyperus Alternifolius. This is one of the cyperus genus or sedge family; it is a native of Madagascar, it has an exceedingly foreign look and is very hardy. This is the plant you see on the other side in Nos. 1 and 2 aquaria. Of all I have tried for centre plants I find the “Umbrella” is the best. The next point of importance in the successful management of an aquarium is to give it proper light and temperature. An aquarium to remain a long time in good order without change of water, should always stand in front of a window where it gets a direct light and very little, or, better still no sun at all. In short put your aquarium in a very light and very shady place. Conservæ a green moss like growth, will in time settle on the sides and bottom of any aquarium, no matter where it stands; but in an aquarium exposed to the sun more conservæ will accumulate in three weeks than would accumulate in three months in an aquarium standing in a shady place. If your aquarium be a large one, say from 8 to 12 gallons capacity, you may after conserveæ has settled to the glass, take out a few quarts of water so as to admit your arm, then rub off the sides of the glass with a piece of course linen or cotton toweling, and when this is finished add the same water you took out. In a day or two, after the water
has settled, your aquarium will look better than at first. The water will then have a part greenish shade and be very clear. A two gallon tank may stand without change of water, from four to six weeks; a four gallon tank from eight to ten weeks, and large tanks from three to six months. You must, however, remove the conservæ from the glass as advised above, and every week or two add as much water as may have evaporated.

In January, 1877, I distributed a circular recommending in the bottom of aquaria two inches of sand with a top layer of pebbles in which to insert the plants for growth. I have since discovered that this process is neither ornamental nor beneficial, and is, at the same time very troublesome.

I have now on hand a great variety of rock work ornaments in various styles for the many different sizes of tanks. These rock work ornaments have niches in the bottom. The plants are put in these niches and fastened underneath with a piece of soft metal which I have in use for the purpose of holding it together. All the weeds or water plants I have previously mentioned in this circular will grow without root, except the Valisnaria Spiralis. So after you have the plants inserted in the niches of the rock work ornament you place it in the tank, and put around it for ornament a few pebbles and shells. Thus I claim to have the care and keeping of aquaria down to fine points.

Occasionally a piece of plant may loosen from the bottom and come to the top, but this matters not for the plant will grow swimming and throw out oxygen as well. Let it swim therefore and insert it again when you plant the aquarium over. Whenever you wish to clean your aquarium do it this way: First take out a few quarts of water, then lift out the rock ornament with plants, then take out more water, down to three or four inches, it will then be easy to take out the fish. You may remove them with your hand.

[Note. —Scientists claim that fish should not be handled. They also recommend that an aquarium should be arranged for at least ten days (so that the plants may take root) before you add animal life. This is all nonsense. Scientists have good theories but they are not always practicable. Any scientist who has made aquaria part of his study can come to me and learn something in a practical way, for no scientist in the country has had the experience that I have had in the aquaria line.]

Lay the fish after you remove them in a basin of hydrant water, if very cold add very little warm water, for fish, although cold-blooded would be thrown into spasms sometimes killed by a sudden change. Now put the pebbles and shells into a tin basin or a wooden bucket and wash them well. Take out the plants from the rock work and let the hydrant run over them strong. Now wash and scrub the rock work ornament with a hard brush, and insert the plant into its place in the ornament. After washing the tank with fine silver sand, without using soap, replace everything as it was, fill the tank with water, and your aquarium will remain in good condition for many weeks. A handy person
may clean a twelve gallon aquarium in fifteen minutes or less, and this is to be done only four times a year. Fish require but little food, I have it for sale. The fish in a twelve gallon aquarium will not use $1.00 worth of food a year.

Of this food use very little. Be sure not to put in your aquarium more food than the fish will at once eat from the top, for if it sinks to the bottom it will make the water slimy and milky. In time fish will get tame, and when you hold the food over the surface of the water, they will follow your fingers all around the aquarium. Be sure not to use as food bread crumbs, crackers, raw beef, etc., for fish are very ravenous, they will kill themselves eating. My fish food is made very light.

How to Balance the Oxygen and Carbon Forces. —We have many species of fish that may be introduced in parlor aquaria, of which the following are the most popular: first of all, the Goldfish; it is the prettiest of all the aquaria fish and the best adapted. It may seem curious to you, reader, but it is a positive fact, the goldfish requires less oxygen than many other species of the finny tribe. In an aquarium not sufficiently supplied with oxygen liberators, when all other fish have suffocated the goldfish will be still alive. Outside of goldfish you may add to your collection the Rough Yellow Perch, Common Sunfish, Black Eared Sunfish, Striped Dace, Shining Dace, Pigmy Dace, Brook Trout, Common Eel, Common Catfish, Stickleback, Minnow, Newts, or many spotted triton, and red salamander. Always add a common tadpole, for it possesses considerable interest in its development into a frog. I have continually on hand a supply of the above mentioned species of fish, such as can be obtained at the different seasons of the year. All aquaria bought from me will be of course properly stocked and receive my personal attention.

Now, reader, if you wish to replenish or stock an aquarium, I will advise you as well as possible, so that you will not overcrowd your aquarium one way or the other. In the first place, I would not advise any smaller globe or tank than one of two gallons capacity. To pen up fish in vessels smaller is cruel. If you cannot afford the cost of a two gallon globe or tank, get none. A two gallon aquarium, to be properly stocked, needs one bunch of weeds, two goldfish not over four inches long, and from two to four small fish. A four gallon tank needs two bunches of weeds, four goldfish and about eight small variety fish may be added. The larger tanks may be stocked in proportion. Deaths will occur in the best regulated families, and also in the best regulated aquariums. If dead fish or decayed pieces of plant are suffered to remain in the aquarium, decomposition will set in and it will soon spread disaster through the tank. For the removal of these I have glass tubes of various sizes, which act by being put into the water with the finger over the aperture at the top; the tube, until the finger be removed, will remain filled with air; place it over a bit of decaying plant or particle of refuse, remove the finger and the water will rush in, carrying with it the offending object into the tube. Thus you may temporarily clean your aquarium without disturbing either fish or plants.
The best temperature for aquaria is from 45 to 65 degrees Fahrenheit. Less than 48 deg. will not hurt, but over 65 deg. is not recommendable. When a room is artificially heated, a good temperature for aquaria can always be had near a window as advised above.

There are many little annoyances to the inexperienced aquarist, which, though they amount to nothing, still give cause for worry over their little finny pits. Fish coming to the surface is quite natural and does not indicate that they want a change of water, (unless they are continually at the top and stand almost erect.) When fish stand still, or swim very little, it is not a sign, as some think, that they are sick. Nay, to the contrary; it is a sure sign that your aquarium is in a very good condition.

From time to time I intend to distribute, free gratis to my patrons, circulars (similar to this) on the care of Canaries, Mocking Birds, Parrots and Aviaries. The first will be on “The Care of Canaries—how to raise and properly educate them to Sing—how to treat them when getting sick.”

Yours truly, HENRY BISHOP, 49 E. Baltimore Street.

Entered according to Act of Congress, in the year 1878. by Henry Bishop, in the Office of the Librarian of Congress, Washington, D. C.

WIRE STAND AQUARIUM.

This is the beautiful Premium Bell Tank Aquarium. I have two sizes. The stand is of wire—green and bronzed, or galvanized. The largest of the two sizes is altogether 4 ½ feet high including tank and exclusive of plant. Height of Stand 3 feet two inches, Tank 16 inches. Capacity of upper Tank 12 ½ gallons, capacity of lower tanks 2 gallons. Price all complete $20.00. Second size, Price all complete $17.50.

JARDINIER AQUARIUM.

I claim my Jardinier Aquarium to be (for the price,) the prettiest Parlor Aquarium ever introduced here or elsewhere. The stands are of Iron, Verde Antique, 3 feet high. The large stand has rollers. The tank is of 8 gallon capacity. Price all complete $12.50. The second size stand has no rollers. Tank is of 5 gallons capacity. Price all complete $10.00.

IF YOUR BIRDS ARE SICK USE BISHOP'S BIRD HEALTH RESTORER.

RUSTIC STAND AQUARIUM
IF YOUR BIRDS ARE TROUBLED WITH VERMIN, USE BISHOP'S BIRD LICE DESTROYER

The Rustic Stand Aquariums are like many other improvements of my own origination, and I am proud of them for they are much admired. The stand of the large size is 16 inches high. The capacity of tank is 5 gallons. Price all complete $8.50. The second size stand is 10 inches high. The capacity of tank is 2 gallons. Price all complete $3.00. These stands, although made of Terra Cotta are an excellent imitation of wood, almost deceiving many admirers.

P.S.—I beg to state that the above cuts are not overdrawn. The drawings having been made from original specimens on exhibition in my store.

Although I have given special attention in this circular to the aquaria, my stock of Birds and Cages is nevertheless at all times, the largest and most select in the city. I sell them at prices to suit the times, and warrant every Bird as represented.

HENRY BISHOP, IMPORTER OF AND DEALER IN FOREIGN AND DOMESTIC SONG AND PET BIRDS, YOUNG AND TALKING PARROTS, PET ANIMALS, SEEDS, PREPARED MOCKING-BIRD FOOD, ALL KINDS OF CAGES, Depot for Gold, Silver and Aquaria Fish, IRON-FRAMED AND BELL TANK AQUARIUMS, Ferneries, all sizes of Fish Globes, Water-Plants, SHELLS, PEBBLES, ROCK-WORK, AQUARIA ORNAMENTS, &c, &c.

No. 49 E. BALTIMORE STREET.

Manufacture of Mocking Bird Food a Specialty.