

"A wife, domestic, good and pure,
Like snail should keep within her
door;

But not, like snail, with silver track,
Place all her wealth upon her back."
W. W. How, in *Good Wives*

PULMONATA, the snail, was the first dweller on earth to use a trailer home for his habitation. Unlike man, this gastropod mollusk has never known any other kind of home. He takes it with him wherever he goes and because he camps wherever night overtakes him or whenever he gets tired, he has been dubbed the "tramp of the garden."

But the snail's trailer house is more than a home. It is his fortress—his protection against his enemies, of which there are legion. Proverbially slow, he cannot run away. He has no teeth or claws with which to defend himself and so he can only withdraw into his shell and trust to its fragile strength for his safekeeping. If it fails him there is no hope, for he cannot even emit evil smells to ward off his pursuers, as many caterpillars and beetles do. When the danger has passed, he comes out again and proceeds on his unhurried way.

One advantage Pulmonata has over human beings and most other animals is his ability to pop his eyes out of his head to look around a corner or over an obstruction. Each of his eyes is on a little rod or horn, and he can extend one or both at a time for the purpose of looking out from behind the sheltering leaves or around a stone to see if the way is clear.

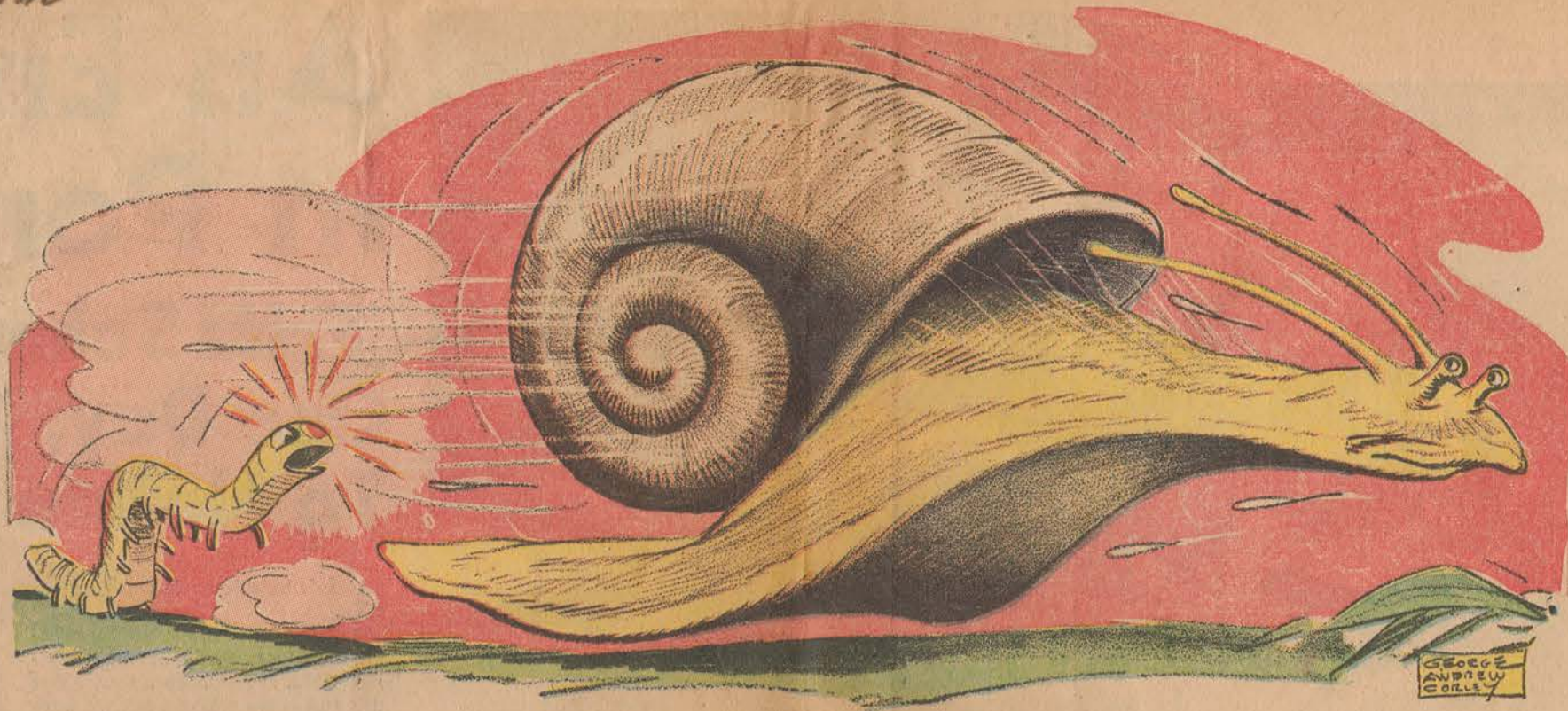
Most people are inclined to view the snail with disdain. Possibly not with the same feeling of repulsion with which they regard the garden devastating slug, but nevertheless they see little to excite their interest. This is not the case with a friend who lives on Portland Heights. Much to my surprise, a few weeks ago, he asked me what I knew about snails and what to feed them. It seems he and his wife had been for a walk in the woods near their home and had found one of these creatures in the trail. They were struck with the beauty of its markings, the interesting way he was feeding, making use of his periscopic eyes, and its general behavior. They had taken it home and wanted to keep it as a pet, so desired to learn something of its food habits.

For several days they kept it about their home. Sometimes it would wander away but would be found and brought back. Finally the day came when the little gastropod disappeared entirely. And since that day my friend has besought me to help him find another one. But like in so many other similar instances, until we really wanted to find one of the creatures they seemed to be under foot every time we stepped into the woods. Now that one was desired we cannot find a single specimen.

There are myriads of different kinds of snails upon the earth. Some are land dwellers and others live in the water. All are moist creatures and without moisture or protection from the heat and drouth they shrivel and perish. In time of stress land snails curl up inside their shells and remain there until the dry



John Mc Kercher, present owner of Finley mills, holds a buckskin grain spout first used in pioneer milling.



SNAIL—Original House Trailer

spell is over. So far as this writer knows there are no desert forms of the species.

The scientific name, pulmonata, means they have lungs and are therefore air-breathers. They are among the lowest form of animal life equipped with lungs. A liberal interpretation of the name gastropod means "his belly is his foot." And that is literally true. Someone has said that possibly the reason the snail is so slow is because it has only one foot.

Of the many enemies seeking to destroy the snail, none is more persistent than the tachinid fly. When the snail withdraws into his shell to escape the drying heat it closes the opening of the shell with a curtain of mucus. This not only keeps the moisture in but it also serves as a protection against the tachinid. Apparently when the snail is active it is able to defend itself or is safe from the fly, but during its hibernating or "resting in" periods, the female tachinid hunts through the grasses, along the tree trunks and in other places where the snails go at such times. When the fly finds a snail that has neglected to seal himself in securely she pushes an egg under the edge of the shell and against the soft body of the animal. In a short time a little worm hatches from the egg and proceeds to feed on the body of the snail—eventually consuming it.

Snails are mostly plant eaters but unlike their slimy cousins, the slugs, which have no shells, they rarely do any considerable amount of damage to gardens. At least not in Oregon. They usually prefer

Pulmonata Takes His Home With Him Wherever He Roams

green leaves and stems of living plants but have often been observed feeding on dead leaves. They cut their food with long slender rasplike radula or "lingual ribbons."

In Southern Europe snails are eaten, and are considered choice for human consumption. This is particularly true in France, where there are many snail farms. Their flavor is said to depend much upon the kind of food they themselves had been eating when caught. For that reason we are told by experts it is not best to eat snails freshly taken in the wild state until they have been fed for a time in gardens where only wholesome plants are available. People have been made ill by eating the creatures too soon after they were captured.

But man is not the only animal with an appetite for these peculiar creatures. Birds, opossums, skunks, rats, mice, squirrels, mink and all other water frequenting carnivora have found snails much to their liking. The female lightning bug and the glowworm also are deadly enemies of the gastropods.

Snails are largely nocturnal in their habits. So is the glowworm. Both usually start out on their hunting expeditions at about the same time, soon after nightfall. The glowworm, although "no great

shakes" himself as a speedster, is faster than the snail and has little trouble in overtaking him once he finds a fresh trail. When he catches up with his prey he seizes the snail's foot and begins to eat where the foot is attached to the outer edge of the shell. Before morning the shell is left empty.

Apparently the snail has always been a victim of the glowworm, both in Europe and in America. In Texas the feud between the mesquite snail and the lightning bug family has been traced back to the glacial or pleistocene age, which is the geologic age just preceding the one in which we live. There is a spot near San Antonio where, 20 feet below the surface of the ground, the dead shells of the mesquite snail and the hard wing covers of the lightning bug have been found together in the pleistocene deposits.

It is said that in every locality where there are many snails there will also be plenty of lightning bugs. But sometimes the bugs become so numerous and do such a good job of snail hunting they kill off their own food supply and both become very scarce. The usual cycles of scarcity and abundance seem to follow through in such cases the same as in many other similar examples of the hunted and the hunters.

Wildlife Notes

THE golden plover, rigidly protected at all times by federal laws, probably lives the most adventurous life of any of our shore birds. Unlike other migratory species this bird follows a different southbound route in the fall than it took in the spring. In the spring the flocks in going from their winter quarters in the Argentine to their breeding grounds in the Arctic cross the continent of South America from southeast to northwest and fly over the Gulf of Mexico, reaching the United States at Louisiana. On leaving the Arctic in the fall they strike straight down across a portion of the Atlantic ocean, striking the South American continent at Brazil.

When tens of thousands of trumpeter swans flew north and south across the continent their voices rang like mighty horns from the upper air levels. Now only about 150 of these great birds remain in the United States. They are under the careful protection of the United States government. The number was down to less than 40 a few years ago but they are now gradually increasing both in Yellowstone lake in the park of that name and also at Red Rock lake in Montana. These are the only two places in the United States where the birds now nest.

Is it possible to tame a porcupine? Can one make a household pet of a wildcat or a skunk? These are some of the questions asked of the Wildlife department of this paper. The answer is yes in each instance. Given a young enough animal to start with, a liberal use of patience and a soft voice and the result need never be in doubt. In the case of skunks and porcupines, however, our advice would be to not startle them or do anything to incur their ill will.

For nearly two centuries America led the world in the production of fur. Now only one third of the fur used in this country is produced in the United States. Notwithstanding this fact, Oregon fur farmers, with other fur producers throughout the land, fear the war will result in a dumping of foreign produced furs greater than the American market can absorb.

After 80 Years the Old Mill Grinds Away Day After Day

By BEN MAXWELL

IN THE summer of 1847 solitude along the Calapooya near the present site of Crawfordsville, Linn county, was disturbed by unfamiliar sounds.

Falling axes resounded through the forest, heavy hammers driving home staunch oak dowels echoed and re-echoed against the rocks and wooded hills.

Richard Chism Finley, assisted by James Blakeley and T. A. Riggs, was building a grist mill destined to perpetuate the name of the founder for three generations. Although the original mill was carried away by a flood in the early 1860s, the enterprise established by Finley still flourishes after 92 years of operation, and has the distinction of being one of the oldest businesses in the West.

George Finley, son of Richard C. Finley and now a resident of Roseburg, relates that his father, who founded Finley mill 11 years before Oregon became a state, was born in the Cumberland mountains of Tennessee in 1814. In 1846 the Finley family of father, mother and two daughters started across the plains to Oregon in a wagon train led by Jonathan Keeney. Keeney had previously made a trip to Oregon and returned to the East with a glowing account of possibilities in the region beyond the frontier.

Among others in the train were Hugh L. Brown, James Blakeley, Alexander Kirk and W. R. Kirk. During the winter of 1846-47 the Kirks and Finley located in an indefinite region west of the Willamette. The Browns and Blakeleys, however, established themselves near the present site of Brownsville and became the founders of that community. Soon the Kirks and

Finley, desirous of being near old acquaintances, joined the others in the locality along the Calapooya.

Other immigrants were also arriving, and among the first needs after shelters were established was a source of grist for bread. In those pioneer times the mill at Oregon City was the nearest source of supply. Days of hazardous and laborious travel by ox team through a wilderness was required to reach this mill and settlers along the Calapooya were not anxious for more travel.

So they went into a conference, Finley, they decided, should build the grist mill. Blakeley was appointed to get out timbers needed to frame the building. He was assisted by a hardy corps of volunteers. Finley, assisted by T. A. Riggs, who had staked an adjacent claim, sawed the lumber by hand.

So, the original Finley mill became a crude but welcomed source of flour. Burrs were quarried from granite rock between Lebanon and Brownsville, and were tediously furrowed by hand in primitive manner. Iron for forging then cost around 75 cents a pound, and Finley could afford but little metal for construction. Wheels, elevator cups and cogs were made of sound oak and, while not so efficient as castings, served their purpose well enough.

Before the mill was quite complete news of the gold discovery in California reached settlers along the Calapooya. Building the mill had put Finley deeply in debt. He hastened construction. Then when Calapooya waters first turned the cumbersome machinery, and the plant demonstrated its practical capacity, the builder rode away to the mines to replenish his fortune.

Again fortune smiled on the first

mill in Linn county. Canvas bags containing gold dust began to arrive from California, and the debt incurred in building the mill was soon paid off.

When Finley returned from the mines in the early 1850s he was, perhaps, astonished to observe the influx of new settlers in the Brownsville community. Another flour mill, it appeared, might be a promising and serviceable venture. So, in association with R. V. Crawford and Alex Brandon, another flour mill, known as the Boston mill, was built at Brownsville. Scarcely had operations started before this new plant was leveled by fire. But the pioneers were familiar with misfortune and immediately rebuilt the Boston mill.

Other than Finley, honor goes to Andrew Lacey as being the first miller employed in Linn county. It was he, perhaps, who ground the 1848 wheat crop for Finley while the latter was at the mines recouping his fortune. Later Robert Jones was employed as miller.

Among other interesting documents pertaining to pioneer milling now in possession of George Finley is a faded blue receipt dated Oregon City, December 17, 1853. It mentions payment of a balance due on millstones purchased from George Abernathy, governor under the provisional government, who then operated a store at Oregon City.

The year before, 1852, Thomas P. Adams, then a merchant at Marysville, later Corvallis, signed a receipt for 6600 pounds of flour ground at the Finley mill to be sold on commission. The selling price was fixed at \$6 a hundred pounds.

Although Finley's mill flourished as a commercial adventure, the owner valued social welfare above



This flour mill at Crawfordsville was built by Richard Chism Finley in 1858 and replaced a more primitive plant erected in 1847. Finley mills have been in continuous operation for 92 years and are among West's oldest businesses.

treasure. In the 1850s Samuel Glass arrived from the mines at Jacksonville with a pack train to purchase a load of flour. He presented a poke of gold dust as consideration. But the miller would neither accept the gold nor load the flour.

Impoverished immigrants, Finley pointed out, were rapidly settling the country. Although many lacked money to buy, they did need flour. He would supply the poor immigrant with grist but Mr. Glass would have to go elsewhere to purchase his supplies, perhaps to Oregon City.

Glass then found a supply of wheat near Lebanon and purchased grain at \$8 a bushel. This he did persuade Finley to grind and returned to the Jacksonville mines with his pack train loaded.

Later, when immigrant needs were satisfied, Finley shipped quantities of flour to Yreka and Jacksonville.

During the entire period that his father operated the mill, George Finley relates, he owned no key or padlock. Any man's credit was good, and during the first 20 years of operation he lost but one account.

In 1860-61 Western Oregon was visited by a flood. Rising, rampant Calapooya waters carried away the

original Finley mill, and some 60 hogs that had taken refuge in the basement.

Even so, milling operations at Crawfordsville did not cease. By 1858 local business had outgrown the original mill, and the structure now standing replaced it.

Burrs for this second Crawfordsville mill were quarried in France, and were shipped around Cape Horn to San Francisco. Although some of the machinery used in the original mill was set up in the second plant, more efficient equipment increased production to around 40 barrels a day.

Finley retired from the milling business in the early 1880s and the Crawfordsville plant was soon thereafter acquired by the McKercher family of whom John is the present owner. In 1890, or thereabouts, the French burrs were replaced by rolling machinery and the mill was further modernized.

Twenty or more years ago the Finley mill ceased grinding flour and became a feed mill. In this capacity it continues to operate. During fall months, when the farmers in the Brownsville country lay in winter feed supplies, Finley mill rumbles away throughout the day much as it did 80 and more years ago.