

## Luther Burbank.

The following very interesting paper was prepared by Miss Nelle Ryan and read by her before the Science Club of the high school at the December meeting at the library.

Luther Burbank, the greatest plant-breed in the world, was born in Lancaster, Mass., on March 7, 1849. From his father he inherited a great love for books and from his mother a love for everything beautiful.

From his earliest childhood he was passionately fond of flowers and all kinds of plants and preferred plants as pets instead of animals. One plant that he was particularly fond of was a lobster cactus which he let fall and break. He grieved over his pet plant as any other child would a dog or bird.

When he was old enough to go to school he surprised his teachers by his love for study of nature and birds. Even now he may be seen to turn from the discussion of some important problem of human life to listen to the song of some bird.

At the age of twelve he had such a knowledge of nature and flowers as few boys have at that age. He read and reread all books on nature and science that he could get and his favorite author was, and is, Ralph Waldo Emerson.

When he was quite young he was watching some men put together a mower. There was one piece which they could not find a place for, and young Burbank, stepping forward, told the men where to place it. They did as he said and it fitted exactly. All the men were surprised by the knowledge shown by the boy, and asked him how he knew where that particular piece belonged. He replied "Because you couldn't put it anywhere else!"

He worked for several summers in a factory receiving only fifty cents a day and, as it cost him the same amount to live, he had to study for a long time how to make both ends meet. Finally he discovered a way to construct a machine which would do away with the labor of at least one-half dozen men. He made the invention and his delighted employers gave him a large increase in salary.

All his relatives and friends declared that he would become a great inventor if he would make that his life work. But he disregarded their advice, as he did in later years, and although the course he has followed led through toil and suffering, he has never had reason to regret it.

After he left the factory he began market gardening and seed raising in a small way. There, then, came a day that he never forgot, a red letter day in his calendar. He noticed on the green tops of some potatoes he was raising many variations, but only one bore a seed ball. He thought if from such a great lot, only one bore a seed ball, its product would show still greater variations. Consequently he planted the seeds and got a variety of fine potatoes, one of which he sold to a seedman for \$150. From it came the Burbank potato which has added millions of dollars to the nation.

Shortly after that he suffered from a sun-stroke and sought a climate where he could remain out-of-doors without fear of another attack. So in 1875 with ten of his new potatoes and a slender purse, he started for California, to an unimproved valley between two spurs of the Coast Range Mountains, which is today a fine farming country. He was then twenty-one years of age and possessed of much vitality and endurance. He wished to work awhile till he got enough ahead to start a nursery, and day after day he applied for work but met with no success and his small store of money kept getting smaller. Finally he secured work, which barely kept him alive. He was not able to pay for regular night's lodgings and for months made his bed in a chicken coop. Very often when work was scarce he was reduced to absolute want. At last he found steady employment in a small nursery at very small pay. But he was not able to hire rooms and slept in a room above the hothouse, where for days and nights at a time his clothes were never dry. Constant exposure brought on an attack of fever. A neighbor woman found him, one day, in a very critical condition and insisted upon sharing with him enough food to keep him alive. He protested saying that he might never be able to repay her and it looked as though he would never live to do it, but the woman insisted and saved his life. Never for a moment did he waver from the course he had marked out for himself. He had a resolution of iron, a will of steel, and a heart of gold.

When at last he rose from his sick bed and went about in search of work, things began to turn more and more favorably in his behalf. He went from one odd job to another saving a little money until he was able to start a business for himself. He bought a small plot of ground

and established a nursery, which was to become famous throughout the country.

During his early manhood, amid privations and discouragement, he never let go of his plan of life—not only to be a raiser of plants but an improver and creator.

When he first set up in business he began to experiment. One day he took an order for 20,000 young prune trees. Ordinarily it would take two or three years to raise the trees, but he had to have them ready in nine months. He immediately began to scour the country for men and boys to plant almonds, which were the only seeds he could use that would grow at that time of year. In a short time the young shoots were ready for budding. 20,000 prune buds were grafted into the growing almonds, and when the allotted time was up the trees were ready and young Burbank was a great deal richer.

There came another red letter day in his calendar. It was the day he decided to give up his nursery business and devote his entire time to plant breeding. His friends and relatives were not in favor of this new decision and urged him to continue his business, which was so profitable, but he disregarded their advice and entered upon his new line of work. Slowly he put into effect his new plans. When he had tested a new fruit or flower or an improved old one, he kept it back until he was absolutely sure it would do exactly what he said it would.

This is a good example of the truthfulness of his character. He always tells the truth and his word is considered "good as gold". Although there is nothing secretive in his nature, yet there are depths which his nearest friends do not fathom. He is always just as he is and is absolutely unspoiled by flattery and praise of his deeds. He is frank and unrestrained, yet those who have believed they knew him thoroughly, have found even after a course of years, that they do not. He is a lithesome figure, full of nervous strength, with hair and mustache streaked with gray and eyes full of fire, aglitter with earnestness, twinkling with merriment or sad or gay as the mood passes. His face is the face of a philosopher or a wise man of affairs. He is quick of movement, soft and gentle of speech, a rare conversationalist when in the mood, but more inclined to draw others out than talk himself. Once started on some subject of deep interest, he becomes so enthusiastic that he almost exceeds the limit of moderation. He is generous in the praise of others and in complete sympathy with any one in trouble. He is witty and humorous and every one who has met him says:

"He was a man, take him for all and all, I shall not look upon his like again."

The aims of Mr. Burbank are three: 1. The improvement of old varieties of fruit, flowers, grasses, trees, and vegetables. 2. The merging of wild or degenerate types of plant-life with tame or cultivated ones. 3. The creation of absolutely new forms of life unknown to the world.

The general character of his work is included under two heads:

1. Breeding—This is accomplished by sifting the pollen of one plant upon the stigma of another, which results in fertilization.
2. Selection—This is choosing the best and rejecting the worst forms.

He sometimes has five hundred experiments under way at the same time, some of which require ten or more years to become perfect. He uses acres of ground and out of a million plants two or three, or even one, of the best is selected. When he sees two plants which have degenerated and which have great possibilities, whether they are of the same kind or a far different species, if each one has some desired quality, he unites them and startles the world with the result.

He took an English walnut and crossed it with a common California black walnut by pollination, raised seedlings from these, then selected the very best and kept doing this until he had a set which he was willing to trust to themselves. A half dozen of these were put out in front of his house in the street, and neither cultivated or irrigated. In 1895 when fourteen years had passed, the trees were nearly eighty feet high and their trunks two feet in diameter at the height of a man's head. The wood is of fine grain, hard, having a lustrous silky effect, and taking a high polish. He named this the "Paradox."

Another one of his productions is the royal walnut which will grow in any climate, made by uniting the California black walnut, an old fashioned New England black walnut.

He has also created a chestnut tree which bears nuts in eighteen months.

Another so-called commercial achievement of Mr. Burbank's is the potato.

This was made from many varieties of potatoes and tomato plant. It is a fruit and not a vegetable, ap-

pearing at first as a tiny green ball on the top of a potato plant. It grows to be the size of a small tomato and is white, bearing a few small seeds, and is delicious either raw or cooked.

The improvement of the prune and plum is another commercial achievement. The new plums and prunes have been produced by crossing and selection of seedlings. Sometimes six or seven plums are combined to get the desired result. One very important plum is the one he has made with out a pit, a combination of a tiny plum with a very small pit which grew in France, and other large ones.

When a small boy, Mr. Burbank loved flowers of all kinds, but the one he loved best of all was the common field daisy. He knew it was a worthless little flower and an outcast and resolved to help it to a higher place in the world. He never lost sight of this resolution and after many years he began to look for another daisy which would help him. In Japan he found one with a wonderful whiteness which belonged to no other daisy he had ever seen. But this was not enough, so he obtained in England a daisy which was larger and coarser and had a less graceful stem than the other. First he pollinated the English daisy with the little field one, and the Japanese daisy with the result. Soon he had many thousands and blossoms growing from this combination, and he selected the best one-half dozen and from them produced the wonderful "Shasta" daisy, which he named after Mt. Shasta, because of its whiteness. This beautiful daisy ranges from three to six inches in diameter, is snowy white, on a long graceful stem.

Another plant upon which he spent years of study is the cactus. This was the most stubborn plant he had ever dealt with, but he saw great possibilities in it. It was hardy and its leaves were juicy and nutritive, but could not be eaten because of the thorns. There were two things which had to be removed, the countless thorns and the woody fibre of the thalli. This was accomplished and is probably the greatest one of his creations, for it is now suitable for food even for man as well as for beast. It will grow anywhere and is most valuable in the desert.

He once secured a few seeds from a blackberry growing in the Himalaya mountains. He kept selecting the best through a series of years until he had one plant which covered 150 sq. ft. of ground, stood over eight feet high and bore over a bushel of fruit.

Other combinations are black raspberries, and blackberries, peaches and almonds, the California dewberry and a Siberian raspberry resulting in the "Primus" berry, apricots and peaches, domestic plums and wild goose plums, quinces, blackberries and many others.

In fact, Mr. Burbank says there is no barrier to obtaining fruits or flowers of any size or form desired, and that all that is needed is a knowledge to guide ones efforts in the right direction.

O. B. 37. Page 238. Cause 7284.

### Sheriff's Sale.

By virtue of a certified copy of a Decree to me directed, from the Clerk's office of the Jasper Circuit Court in a cause wherein The Jewish Agricultural and Industrial Aid Society is plaintiff and Mendel Sensibar and Kayle Sensibar, his wife, are defendants, requiring me to make the sum of sixteen hundred and thirty dollars and forty-four cents, (\$1630.44) with interest on said decree and cost, I will expose at public sale to the highest bidder, on

SATURDAY, THE 9th DAY OF JANUARY, 1909, between the hours of 10 o'clock a.m. and 4 o'clock p.m. of said day at the door of the Court House of said Jasper county, Indiana, the rents and profits for a term not exceeding seven years, of the following described Real Estate, to-wit:

The northeast quarter (1/4) of the northwest quarter (1/4) of section nineteen (19), township thirty-two (32) north, range five (5) west, containing forty (40) acres more or less in Jasper county, Indiana.

If such rents and profits will not sell for a sufficient sum to satisfy said decree, interest and costs, I will at the same time and place expose at public sale the fee simple of said real estate, or so much thereof as may be sufficient to discharge said decree, interest and costs.

Said sale will be made without any relief whatever from valuation or appraisalment laws.

JOHN O'CONNOR,  
Sheriff of Jasper County.  
A. H. Hopkins, attorney for plaintiffs.  
Dec. 15-22-29

Survivors of the fleets that served in the Mississippi River during the civil war, known as the Mississippi Squadron, Eliett's Ram Fleet and the Marine Brigade, held a meeting in New Albany to prosecute their claims to full recognition for their services during the war.

## Public Sale.

As he is going to California to live the undersigned will offer at public sale at what is known as the Chas. Baker farm, 5 1/2 miles south of Rensselaer and 6 1/2 miles north of Remington, on

TUESDAY, JANUARY 5, 1909  
Commencing at 10 o'clock, the following described property:

### 6 HEAD OF HORSES

1 mare 7 years old, weight 1400 pounds, good single driver; 1 mare 13 years old, weight 1300, good work; 1 mare 14 years old, good worker; 1 gelding 13 years old, weight 1400; gelding 4 years old, weight 1100; 1 yearling horse colt.

### 5 HEAD OF CATTLE

3 milk cows, one of which is a 3 year old Jersey; 2 Jersey heifer calves

### ONE THOROUGHbred Duroc

### JERSEY MALE HOG

### MALE HOG

also six shoats, weighing about 30 pounds.

### FARM IMPLEMENTS

1 broad tire farm wagon, nearly new; 1 good two-seated buggy, canopy top, nearly new; 1 16-inch riding plow; 1 two-row cultivator; 1 three-section harrow; 1 set farm harness; 1 U. S. cream separator, nearly new; about 12 tons of hay in stack.

### HOUSEHOLD GOODS

A Mason & Hamlins organ, suitable for small church or school house; 200-egg, Sure Hatch, incubator; and all of my household goods.

### POULTRY

About 4 dozen young Brown Leghorn hens; also some Plymouth Rock hens.

### TERMS OF SALE

11 months time, on sums over \$5, if paid when due, if not paid when due 8 per cent interest from date. 6 per cent discount for cash.

### W. J. HALL.

Fred Phillips, Auctioneer.

C. G. Spitzer, Clerk.

Hot lunch on the grounds.

## PUBLIC SALE.

Haying decided to quit farming, and go into other business, I will sell at Public Auction, at my farm, 4 miles east and two miles north of Rensselaer and 2 miles north of Pleasant Ridge, commencing at 10 a.m.

MONDAY, JAN. 18, 1909

The following property, part of which belongs to H. E. Lowman:

### 10 HEAD OF HORSES AND COLTS

1 gray mare 10 years old in foal, weight 1400; 1 gray mare, 9 years old in foal, weight 1450; 1 sorrel horse, 9 years old, weight 1500; 1 sorrel horse, 13 years old, weight 1200.

One bay mare 8 years old in foal to road horse, a good driver, second to none. 1 bay mare 9 years old in foal weight 1500.

Other combinations are black raspberries, and blackberries, peaches and almonds, the California dewberry and a Siberian raspberry resulting in the "Primus" berry, apricots and peaches, domestic plums and wild goose plums, quinces, blackberries and many others.

In fact, Mr. Burbank says there is no barrier to obtaining fruits or flowers of any size or form desired, and that all that is needed is a knowledge to guide ones efforts in the right direction.

### O. B. 37. Page 238. Cause 7284.

### Sheriff's Sale.

By virtue of a certified copy of a Decree to me directed, from the Clerk's office of the Jasper Circuit Court in a cause wherein The Jewish Agricultural and Industrial Aid Society is plaintiff and Mendel Sensibar and Kayle Sensibar, his wife, are defendants, requiring me to make the sum of sixteen hundred and thirty dollars and forty-four cents, (\$1630.44) with interest on said decree and cost,

I will expose at public sale to the highest bidder, on

### MONDAY, JAN. 18, 1909

12 HORSES—One dun mare, 9 years old, weight 1500, in foal (purchaser to pay for colt); 1 dun mare coming 4 years old, weight 1100; 1 bay gelding coming 4 years old, weight 1400; 1 bay gelding coming 4 years old, weight 1100; 1 grey mare coming 5 years old, weight 1200; 1 black mare coming 3 years old, weight 1200; 1 roan gelding coming 3 years old, weight 1300; 1 grey mare coming 3 years old, weight 1200; 2 iron grey geldings coming 3 years old, weight 1100; 1 bay mare coming 3 years old, weight 1000; 1 dark bay mare coming 3 years old, weight 900, trotter.

13 CATTLE—Consisting of 7 fine dairy cows, some with calf by side, others to be fresh soon; 3 coming 2 years old; half Jersey heifers, fresh in spring; 3 yearling steers.

14 HOGS—Consisting of shoats weighing 100 to 150 pounds each.

15 SHEEP—Consisting of ewes, bred to lamb about April 1st.

IMPLEMENTS, WAGONS, ETC.—2 farm wagons, broad tire; 1 wagon, about as good as new; 1 good corn planter, fertilizer attachment and 80 rods of wire; 1 good mowing machine; 1 Hoover potato digger; 1 potato planter; 2 sets work harness, about as good as new; 1 riding cultivator; 1 walking cultivator; 1 disc; 1 breaking plow; 1 weeder, 2-horse; 1 sleigh; 300 bushels good corn, and numerous other articles.

TERMS—A credit of 12 months will be given on sums of over \$10 with approved security, without interest if paid when due; if not paid when due, 8 per cent will be charged from date of sale. A discount of 6 per cent will be given for cash on all sums over \$5. All sums of \$5 and under, cash in hand. No property to be removed until settled for.

JAMES E. MOORE.

Fred Phillips, Auctioneer.

C. G. Spitzer, Clerk.

Hot lunch.

### NOTICE OF ADMINISTRATION.

Notice is hereby given that the undersigned has been appointed by the Clerk of the Circuit Court of Jasper County, State of Indiana, administrator of the estate of Priscilla Humes, late of Jasper County, deceased.

Said estate is supposed to be solvent.

JOHN W. HUMES.

Dec. 19th, 1908.

Administrator

Dec. 22-29-J.5

Alleging cruelty and habitual drunkness, Mrs. Bernard L. Wallace, of Logansport, daughter-in-law of Col. Ben. Wallace, millionaire circus man, Tuesday brought suit against her husband for divorce and alimony.

The Wallaces married less than a year ago. The