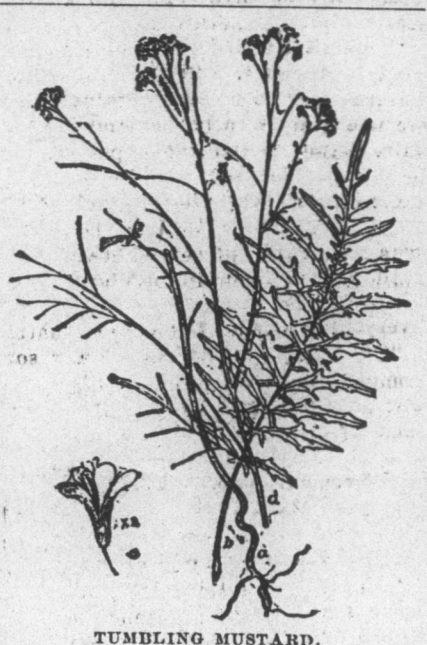




A New Weed Pest.
Tumbling mustard is a troublesome weed in the Canadian Northwest provinces, and has recently been reported from nine different localities in the United States, mostly on waste lands and city lots. Its record in Canada, and the rapidity with which it has already spread in some places in the United States, necessitate prompt action if its further progress is to be checked. The weed is found throughout the greater part of Europe, northern Africa and western Asia. Temper-

ature and moisture have not yet limited its range, and there is every reason to suppose that if left unchecked it will displace the possession of land with daisies, thistles and other foul growth. This pest is a biennial, after germination resembling dandelion or shepherd's purse. A small part of a flowering branch is shown at d. The lower part of the stem bears numerous leaves 3 to 10 inches long and 1 to 3 inches wide, shown at b. The nearly white blossoms, shown at c, appear in small clusters at the ends of branches. Seed is usually introduced in baled hay, poorly cleaned seed, stock cars or sweepings from grain cars. The timothy seed growers of our Western States should be especially active to eradicate this pest in case it appears in their fields. To exterminate, mow the weeds below all flowers, grub out plant and root during August, harrow the land thoroughly at frequent intervals during summer, and seed with sod-forming grasses.—American Agriculturist.

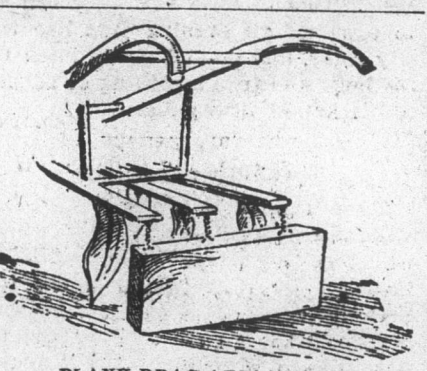


TUMBLING MUSTARD.

It is quite likely that much grain will be threshed while damp this year, as wet weather in harvest time caused it to be got in before fully dry. In most cases the grain will take less harm in the bundle than out of it, says "American Cultivator." So long as grain was threshed by hand, there was no danger of the work being done while either straw or grain were damp. It made the work too hard, and the threshing was always reserved for cold weather, after frost had thoroughly dried out both straw and grain. When horse power threshing machines came into use, there was nearly as much care in having the grain in good condition for threshing. We have seen the threshers stalled when the grain came too fast or too damp. In the large steam threshers the bundles go through all right, but if damp, more or less of the grain goes into the stack. The evil of the loss of grain is not confined to the loss of grain by waste. What is put in the granary is much more likely to heat and become musty than if it is if the grain has been thoroughly dried in the straw.

To Prevent Evaporation.
A plank drag behind the cultivator to smooth down ridges and thus keep the soil from rapidly drying is advised by many investigators, says Farm and Home. This is particularly important during a drought when all the moisture in the soil must be retained if possible. Ordinary cultivating between the rows leaves deep depressions and high ridges, thus exposing double surface to the action of the sun and air. The plank drag smooths down these ridges, while leaving the land light and porous. An Ohio farmer advises rounding the edges of the plank itself.

Plank Drag Attachment.
4y. from end to end, so as not to disturb the earth deeply near the plant rows. Our illustration shows an easy way of attaching the plank.



PLANK DRAG ATTACHMENT.

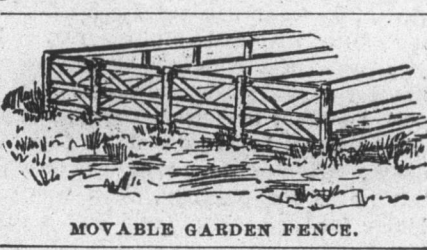
Seed Corn.
The practice is common among farmers, even among those the most advanced, to select seed from the body of the ear, and to discard the small grains that grow on the tips and butts of the ears. They do so from the conviction that like produces like, and the stronger plants should be obtained from the larger grains. If, however, such a practice were persevered in from year to year, it would result in

the production of ears with few grains of corn on the tips or none at all, for the distance of a full inch from the end of the ear. It has been ascertained from experiment that corn produced from the butt grains comes first in tassel; that from the body grains tassels next, and corn from the tip grains last of all. The difference between the periods of tasseling will average a week or ten days. This is nature's method of providing an abundance of pollen, to complete the fertilization of all the grains on the ear. It may not be wise to plant all the small grains from the tips of the ears, as there would then be a danger that the corn would be too thick. This difficulty may be obviated by running the seed through a sieve, with meshes of suitable size, after the corn has been shelled.

Agricultural Education.
Agricultural education is as essential to the farmer and stock raiser as a classical training is to a man who follows literary pursuits. If a young farmer has a chance to avail himself of the instruction given in agricultural colleges, though of a theoretical and experimental nature, it will save him much time and perhaps many hard knocks. Successful farming has become a science, and the sooner one learns the nature of the soil he works and the adaptability to it of seeds and grains, the better he will be equipped to apply his own practical knowledge and experience. Shiftless, haphazard farmers will never stand a show with men who are thoughtful, progressive and energetic. The best posted man is generally the most successful, and for that reason every farmer should endeavor to have a library as large as he can afford, and in these days of cheap books most every one can afford plenty of instructive books for a winter's reading.

Land Measure.
792-100 inches, 1 link; 100 links, 1 chain; 1 chain is 66 feet or 4 rods; 1 rod is 16 1/2 feet; 160 square rods is 1 acre, or 208 feet 8 1/2 inches square is one acre; 43,560 square feet is 1 acre; 4,840 square yards is 1 acre; 89 chains make 1 mile; 320 rods make 1 mile; 1,760 yards make 1 mile; 5,280 feet make 1 mile; one-half mile square contains 160 acres; 4 miles square contains 2,560 acres; 5 acres of land measures 408 feet 8 1/2 inches square; 10 acres of land measures 660 feet square; 15 acres of land measures 808 feet 4 inches square; 30 acres of land measures 933 feet 4 inches square; 25 acres of land measures 1,056 feet square.

Cultivating a Fenced Garden.
Some kitchen gardens must be fenced, or destruction from straying cattle will follow. It is a misfortune, however, to have a garden so fenced that cultivation cannot take place. The accompanying sketch shows a way to fence a small garden, that admits of easy and thorough cultivation. The garden must be entirely in rows running lengthwise. The side fences are permanent. The ends are panels of



MOVABLE GARDEN FENCE.

fence that hook on to posts set permanently, each post being in line with a plant row in the garden, so that they will not be in the way of the horse and cultivator. It is but a moment's work to take down, or put up, these end panels, as they can be made of light strips.

The Apiary.
Strong colonies protect themselves against robbers.

Do not let the sun shine directly upon the hives.

Bees hatched in the fall will live through winter until spring.

All excess of drone comb should be removed from the hive.

One advantage in wiring foundations is that it will bear a heavier weight of bees.

When a considerable number of hives are kept, seven feet each way is close enough to place them.

Pure Italian bees, as a rule, are the easiest handled. Not only do they sting less, but they keep their places on the combs better.

Poultry Points.
Give fowls shade.

Give fowls air and exercise.

Give fowls lime, grit and light.

Give fowls fresh earth to scratch.

Give fowls green stuff every day.

Give fowls fresh water twice a day.

Oats should be crushed if fed to little chicks.

See that coops are well oiled or white-washed before the little chicks are put into them.

Do not be deceived with the idea that incubators need no care. The best that can be made require attention.

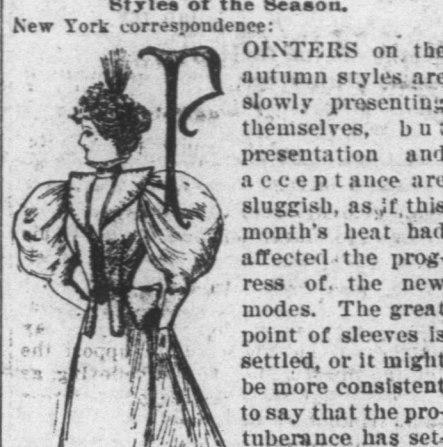
A sitting of eggs was sent from Nebraska to Hammond, N. J., by mail, registered, at a cost of 39 cents, without an egg broken.

FASHIONS FOR FALL.

POINTERS ON AUTUMN MODES PRESENT THEMSELVES.

Balloon Sleeves Have Collapsed and the Skin Tight Affairs Will Soon Be Introduced—Enormous Pipe Folds in Skirts Also Show Decadence.

Styles of the Season.



A MID-SEASON SKIRT.

POINTERS on the autumn styles are slowly presenting themselves, but presentation and acceptance are sluggish, as if this month's heat had affected the progress of the new modes. The great point of sleeves is settled, or it might be more consistent to say that the protruberance has settled. Small sleeves with just a little elaboration at the shoulder are to constitute the first startling change, and when our eyes become accustomed to them, skin tight affairs from wrist to shoulder will be introduced. Then the poor woman with long, bony arms will wish herself back in last year. This is the program laid out; that is plain to see, but it will take much longer to effect it than to explain it, just how no one can now tell. For the present and the near future the woman that would prefer to hide her unattractive outlines may adopt the sleeves that best disguise defects. By so doing she may not be in the advance ranks of fashion's devotees, but she'll be safely stylish. She may, too, if she wishes to, buoy herself up with the hope that there will be some break in this program, but though its fulfillment may be slow, indications now are that it will be sure. Women overdid and over-inflated their sleeves when they had them big, and even prettier when the shape of the arm was hidden, except about the lower part. These women could always show their arms in evening and negligee dress, and she whose arms were awkward could conceal them entirely if she wished. But fashion is never kind to every one at once. It is always wise for her who has defects to hide to take a middle course,



FINE ARMS NEEDED FOR SUCH SLEEVES.

rather than to try to be in advance, so she may safely put on her fall bodice sleeves like those shown in the first picture, leaving for her more fortunate sisters the models that the second and third illustrations present. The novel cut of the jacket bodice will be proof enough of the garment's newness, and further innovations might make the whole too startling for quiet taste. Suede colored cloth was the fabric of this dress, the skirt being plain and the jacket slashed up to the bust. The overhanging tabs were held to the sides by small chains that fastened to two buttons. Beneath the loose fronts was a fitted white satin vest, the revers were also of white satin, and together with the edges of the jacket were bordered with hair galloon. A puffed white satin frill surmounted the cloth collar.

It needs a well formed arm to make the second pictured dress presentable, and these sleeves are so great a departure from summer styles that it seems as if they would mark the limit of change for a good while. This bodice was sketched in changeable blue and green silk embroidered with fine black chenille. The right side of the jacket buttoned over, the upper part turned over into a revers and the edge was bordered with a gathered silk ruffle, a narrower ruffle trimming the revers. The latter and the stock collar were of black velvet, but belt and draped sash, as well as the sleeves, were from the silk. A skirt of royal blue mohair was worn with this bodice.

In the third model shown the sleeves wrinkled from wrist to half way from elbow to shoulder, ending in puffs that seemed tiny by comparison with what we have recently had. Thin figured



PUFFS THAT HAVE COLLAPSED.

blue silk was the material, the skirt having a silk panel of accordion-pleated plain blue silk. In the bodice the sleeves, vest, collar and wide, girde were of the plain material, but the body was from the figured goods. A

narrow frilling finished the stock collar, and wider frills ornamented the wrists.

While the puffs of sleeves are collapsing the stiffness will gradually go out of skirts, and women may reasonably hope that we will eventually arrive at something like the soft bell skirt, the most graceful skirt into which women ever put themselves. Certain it is that house gowns will have a little train, and will be long all around, with the hips fitting close, and though the skirt will spread toward the hem it will not flutter or crackle. The enormous pipe-folds of the last two seasons will hardly be carried through this season, though at present they are acceptable enough. Two suitable types for the period between summer and early winter are displayed in the last two pictures. This period is one in which the new styles will develop fully, or at least point the way along which the change is to come, and until one stage or the other is reached those women whose outlay for dress is moderate will



A MID-SEASON SKIRT.

do well to watch and wait, so far, anyway, as the cutting of new goods goes. This first skirt is of brown mohair, and is embroidered at the hem with dark brown soutache in a pretty scroll design. The bodice first hooks in the center and then a white silk vest, which is shirred three times with a narrow head, laps over. The body of the waist is entirely covered with soutache and the large collar, the wired basque and the ornaments on the stock collar are white lace. Lace ruffles edge the sleeves, which are embroidered at the wrists to harmonize with the remainder.

In the final picture a skirt is shown that was of peach colored silk, ornamented with an elaborate embroidery done in cream and different shades of green silk. The jacket bodice had a short basque edged with a narrow lining insertion, and the large collar, whose points formed revers reaching to the waist, was of ecrû open work linen. A large puffing of chiffon finished the neck, and ruffles of the same were put at the wrists. Both these dresses are well suited to the mid-season, and even though November finds us confronted by many positive changes of styles, either of them can be renewed at little expense or trouble.

It is at about this time that the summer girl begins to take stock of her summer wardrobe, with a view to its future possibilities. Perhaps two of her gowns will do to put away just as they are for next year's use. In that case the sleeve protectors are taken out, and all crumples are smoothed before the dress is laid away. If it be a wash dress and is soiled, then washing is done before putting away, but no starching. The gown is pressed, that



A SHOWILY EMBROIDERED SKIRT.

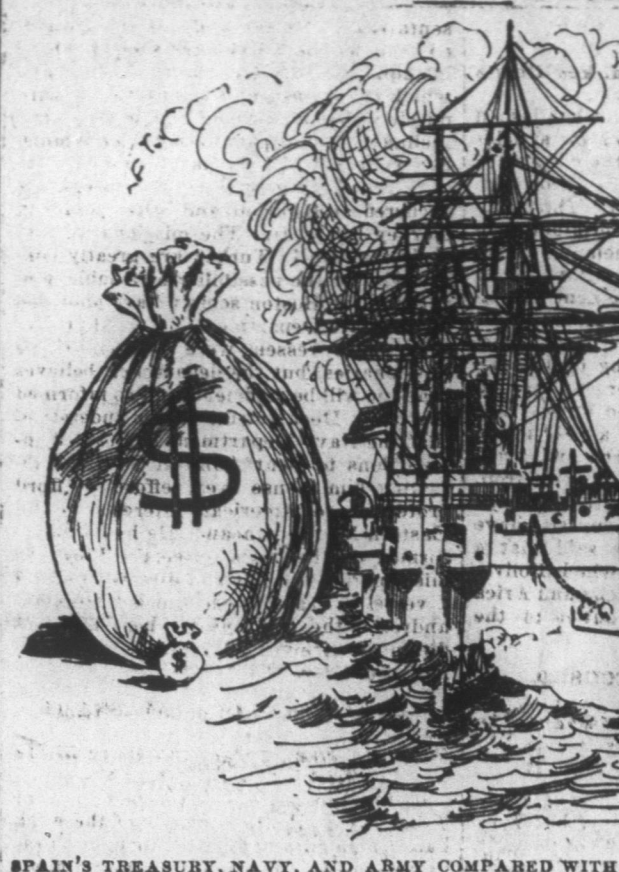
the "rough dry" wrinkles may not set and spoil the goods, but no starch is allowed.

Some of the summer dresses are not fit to hold over and will be of no use during the winter. Rip up such; they are not fit to give away if they are not fit to keep. For it is bad taste to bestow faded and drizzled finery on poor folk! Ribbons, silk lining, a breadth or so of the gown itself, the accessories, a few yards of such chiffon as is uncrushed, an artificial flower or so, buttons, hooks and eyes, linings—these are sure to be something from the dress that is worth keeping. All the rest burn up. It is a mistake to keep soiled or tumbled pieces, but the pieces that are worth keeping will help immensely in the completion and planning of your next summer wardrobe. If you have a skirt that is lined stuff it will be best to take the stiffening out before you put the skirt away. The stiffness is likely to go out of the lining anyhow by next season; again, there is hardly a chance that stiff skirts will be pretty next summer, and in any case the sharp folds of the stiff interfacing are likely to cut or bruise the outer material during protracted folding. Folks who have two houses often leave summer clothes, shawls, and parasols, etc., in a storeroom in the summer house. There is likely to be more room there than in city quarters, and you will, of course, make at least one visit to the summer place before the next year.

Copyright, 1906.

"Men who have seen a good deal of life don't always end by choosing their wives well."—George Eliot.

WOULD BE MERE TOYS.

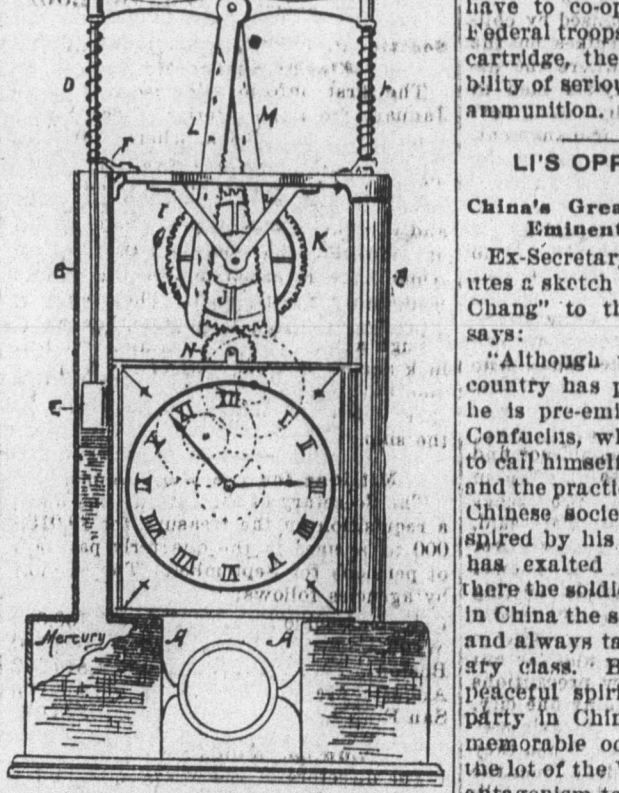


SPAIN'S TREASURY, NAVY, AND ARMY COMPARED WITH THOSE OF UNITED STATES.

A "TEMPERATURE" CLOCK.

Expansion and Contraction of Mercury Keeps It Perpetually Going.
The "temperature" clock is a novel scientific contrivance that promises to solve the problem of how to construct a timepiece so that it will continually run, and never need attention. It is clearly shown in accompanying diagram, and is described as follows:
It is composed of two reservoirs—A, located a short distance apart, each of which has centrally a tubular standard B, open at their upper ends, and connected by a cross bar C. Within these tubular standards are placed pistons D, having packed piston heads E, and a suitable quantity of mercury is placed within the reservoirs so that the tubes B will be partially filled.
The piston rods D pass through keepers F at the upper ends of the standards, and the upper ends of the rods are held in proper location to each other by means of a cross bar G. A coiled spring H is placed on each rod D, between the bar G and keeper F, in order to keep the plungers E firmly seated on the mercury, and to lower the cross bar G when the mercury contracts.

Below the connecting cross bar C is a bracket I in which is mounted a ratchet wheel J and a toothed wheel K on a horizontal shaft. Centrally on the cross bar G two vertically depending rack bars L, M are hinged, the bar L having downwardly projecting teeth, so that when the pistons move the bar G upwardly the toothed bar M engages with the ratchet wheel, and when the pistons



THE "TEMPERATURE" CLOCK.

move downwardly the toothed bar L engages with the same wheel and contrives to rotate it in the direction of the arrow.

As the ratchet wheel J is on the same shaft with the large gear wheel K, and the latter being geared with a smaller gear N which turns the winding mechanism of the clock, it is obvious that whether the pistons move up or down, the clock spring, or the weights, if the latter should be moved, are constantly being wound up, and the clock thereby kept constantly in motion. The mechanism is so arranged that a change in temperature of one degree will wind up the clock for a six hours' run, and it indeed would be a stable temperature if it remained absolutely stationary for a period of six or twelve hours.

THE SAVAGE GUN.

It Will Be Used by the National Guard of New York State.

Herewith is presented an illustration of the mechanism of the Savage gun, which has been selected by the Board of Examiners for the use of the New York State National Guard. The rifle has a lever bolt action, with a fixed central magazine, holding five cartridges, with one in the barrel chamber.

NOT OUTDONE BY THE NOBILITY.



"The Countess of Squeezemore rides a solid gold wheel." "That's nothing. I ride a diamond frame."

INDIANA INCIDENTS.

RECORD OF EVENTS OF THE PAST WEEK.

Alleged Piano Agents Fleeced Many Farmers Around La Porte.—Diphtheria Germs Active After Two Years.—Terre Haute Cannery Very Busy.

Receipts Prove to Be Notes.
Two strangers, alleging to be representatives of a Chicago piano company, have been operating extensively in Northern Indiana, where their peculiarities are said to aggregate thousands of dollars. Paper in the form of negotiable notes has turned up in Warren County, where the plan of operation was to place a piano in a farmer's house with the understanding that the farmer was to advertise the merits of the instrument for a stated sum. Receipts were signed for the pianos, and his paper now turns up in notes of \$400 each. Reports from other counties say the same swindle was practiced and no intelligent estimate can be made of the extent of the swindle.

Sixty Thousand Cans Daily.
The Terre Haute Packing Company has done the biggest business in its history this season. It has been idle but two days, and most of the time has been running nearly its full capacity of 60,000 cans per day. Even with this enormous output it is unable to supply the demand and was compelled this week to reject an order for 12,000 cases. The tomato season is now at its height, and 500 employees are kept busy until late every night. The pumpkin and bean crops also promise to be unusually heavy this year, and the plant will run a large force until late in the fall.

Fatal Germs in an Old Lounge.
In the winter of 1892 there was a fatal case of diphtheria in the family of S. C. Moore, of Kokomo. The lounge on which the child died was stored away and forgotten. A few days ago Mrs. Samuel Sipe, of Pittsburg, Pa., with her small children, came to visit Mr. and Mrs. Moore, her parents. The lounge was brought out for the children, and two of them are down with diphtheria, contracted from the infected lounge.

All Over the State.
Angelo Nicolotti, of Logansport, Ind., died while playfully scuffling with a friend.

Harry Bryant, son of Oscar Bryant, of Patriot, was accidentally drowned in a cistern.

Frank J. Wroff, of South Bend, was kidnapped and robbed of \$75 while on his way home.

Andrew Elliott, a school teacher, was killed at Portland while attempting to board a fast-moving Lake Erie and Western freight train. His body was badly mutilated.

William Willard and George Thornburg were victims of a runaway accident at Marietta, their horse taking fright at a woman bicyclist. Willard is reported as fatally hurt.

The Thornton Argus thinks that perhaps the mysterious recluses who died at Branchville was H. A. Bradshaw, the defaulting trustee of Clinton Township, Boone County.

The village of Greentown was flooded with a scurrilous circular, attacking a number of well-known people in the vilest manner, but giving particular attention to Stanley J. Cooper, the energetic and efficient Deputy Prosecuting Attorney.

James Edwards, who aided in an attempt to murder Patrolman Samuel Deserent a few weeks ago at South Bend, dug his way out of the central police station Tuesday afternoon, while three or four policemen stood near. He forced out the wooden door jam, twisted off a bolt and leisurely walked away.

The Fort Wayne police and sheriff are working on the murder of Elmer E. Ferguson. James MacCormick, one of the employees of Paul's "Last Days of Pompeii," arrested on suspicion, could not be identified as the murderer, and has clearly established an alibi. Oscar Kahlor, the scene shifter, who started the fight, but left the scene before the murderous blow was struck, is held under \$1,000 bond to appear in a charge of assault with intent to kill. The murderer, Charles Standard, joined the show in Sioux City six weeks ago. He has not been seen since he brained Ferguson with a club. He is 26 years old.

A case almost surpassing credulity has developed at English Lake by the return of William Chambers after an absence of forty-seven years. In the spring of 1849 Chambers, then a young man, left his wife, a bride of fifteen months, and a child, a babe in the cradle, to seek his fortune on the Pacific coast. He took up a claim and letters to his wife told of the wealth he was accumulating. He was gone a year when the letters stopped. The wife still clung to the hope that he would return, but months lapsed into years and she died of grief. Fifteen years from the time Chambers left Indiana Mrs. Chambers was again married and five children were born, all of whom are living. Her second husband's name was Wolke, and he lived until 1891. Sunday Chambers, aged 60, his figure bowed with the weight of years, returned home. He did not expect to find his wife, but was to learn her fate and to locate the whereabouts of the child, who had grown to manhood, that he left California, where his fortune had been made. Chambers says that the success on which he had first calculated did not materialize. He became discouraged, and fearful that the news of his failure would crush his wife, he wrote her to cease to write to him. When the time came that a fortune was within his grasp word came that she had died of a broken heart. He gave up his life to the pursuit of wealth, hoping that his fortune would become the inheritance of his only son, of whom he sorely missed. He was also ignorant. The long-separated couple will again live together.

Harry Long, George Kannapel and Gustav Fisher, of New Albany, members of Company C, Indiana militia, have each been fined \$5 for failing to attend the Indianapolis encampment. Cyrus Rhinehart and Joseph Schell have been dishonorably discharged.

There is an apple tree in the yard of A. N. Lines, of Elwood, that presents a strange appearance. The tree is full of apples and has again thrown out blossoms, and is loaded with apples and blossoms at the same time. Nothing like it has ever been seen in that vicinity and it attracts much attention.

While Eddie, the 12-year-old son of William South, of Lebanon, was playing with a revolver the weapon was accidentally discharged, the shot taking effect in the breast of Eddie McCoy, a lad about the same age, who was fatally injured.

Thomas Knott, of Crown Point, was arrested for bigamy. He married his first wife eight years ago in Oklahoma and moved to Chicago during the World's Fair in 1903. He made the acquaintance of Fannie Block, who married him under the impression that he was a single man. Knott had two children by his first wife, and his family four years after he was married. Both Knott and his wife will be tried for bigamy.