

FAMILY STORY

CHIP AND HIS CAMERA.

CHIP TAYLOR lived in a section of country where dollars looked about as big as cart wheels for the very good reason that they were about as hard to get. By all sorts of hard work and many kinds of self-denial Chip had succeeded by the time he had reached his 15th year in saving about \$15, which made him seem a capitalist to all the other boys and also to a great many men, and as everyone knew that Chip was a wide-awake fellow who was anxious to get into steady business for himself, so that he could make life easier for his widowed mother and his little sisters, there was no end of acquaintances who tried to get into partnership with him and help him spend his money.

But Chip's father had always said that partnership was a hard stip to sell in; he had tried it, and he knew, so the boy looked persistently for some business in which he could make his own way, and one day he found it by purchasing a small second-hand camera and becoming a tramp photographer.

Chip's customers had to pay for his education, for some of the pictures which he took during his first few weeks were about as dreadful as could be imagined by a man with a night-mare, but the customers were not art critics; besides, Chip's pieces were cheap, and he was the only man in the business, so he made a little money from the very start, which is more than some of the world's greatest artists have done.

The young photographer had a good head for business, too; he did not set up a studio and smoke had tobacco and grumble about the dullness of business. He took his whole kit in his hands and roamed about the country, in search of people who he thought would be the most likely customers—farmers with horses which they thought would sell well in the city if dealers could know how they looked; women who thought their babies were the prettiest that ever lived, and young people who were in love with each other, and who, therefore, wanted to exchange pictures.

Anyone who has tried amateur photography knows that there are "many slips 'tween the cup and the lip," or, to speak more to the point, between the plate and the finished picture. There are about as many ways of spoiling characters, and Chip, without meaning to do anything of the kind, tried them all.

Practice makes perfect, so, in the course of time, Chip found himself clearing about \$1 a day, which was a lot of money for anyone to earn in that part of the country.

Little by little he learned that portraits of young people were the most profitable part of the business, and he began to be smart enough to take the pictures of pretty girls on credit or for nothing, trusting to luck to find out which young man was first or most "gone" on each girl. Then he would offer the young man, in strict confidence, to get him the girl's portrait at the customary price.

Chip tried the system in reverse—that is, by "taking" some of the more popular young men, trusting to work them off upon susceptible girls, but somehow this plan did not amount to much.

Either the girls hadn't any money, which is quite likely, or, still more likely, they didn't want young men's faces badly enough to pay for them, so Chip gave it up as a bad job and left his latest plates of young men to be developed when he had nothing else to do.

One of these undeveloped plates was of Frank Wiley, the best-looking and the most popular store clerk in the village. Almost any girl would pay a cent a yard extra for material for a calico dress for the pleasure of purchasing from Frank Wiley, and she would wait an hour to be served by Frank rather than buy of the proprietor himself.

Frank was a "great catch" in the estimation of all the girls and their mothers, and he became all the more so because he declined to be caught.

Suddenly, however, in the way that the unexpected has of turning up in even the least promising places, something occurred which set all the village girls to become jealous and curious. Some people who seemed to be rich, for they were traveling by carriage, with two servants in a buggy following, were obliged to stop in the village and call a physician for one of their party, an old lady.

The physician said the invalid must rest for several days, so there was a lot of scurrying to find proper accommodations for the party, there being no hotel in the place. They were finally accommodated by old Mrs. Trewey, whose husband had built the biggest house in the town and died just as the house was completed.

Old Mrs. Trewey quickly became the most popular woman in the village; neighbors who had almost forgotten her soon found excuses to borrow something, or to ask a question which they had long wanted to ask—anything, for an excuse to find out about people whom they had never seen, but who seemed to be rich.

The village interest in the strangers increased when one of the newcomers, a handsome young woman who seemed to wear her Sunday clothes all the time, appeared on the main street of the village and dropped into the two or three stores, apparently because she could not amuse herself unless she was buying something.

Of course Frank Wiley did his best to sell her something, and sell her as much of it as possible; people who paid cash, instead of having things charged, and who did not try to "beat down" the prices asked, were as scarce in that village as saints in rum shops.

It did not take the village girls and other rascals long to learn that the young woman, whose name was Eunice Trait, did most of her purchasing at the store in which Frank Wiley was clerk, and that anyone else who went into that store while Miss Trait

was there was obliged to wait until the stranger had made her purchases. They also learned, or thought they did, that the young woman took as much time as possible in transacting her business.

And it was all because she wanted an excuse to talk as long as she could with Frank Wiley, who certainly did all in his power to be obliging.

Public opinion was divided on the subject; the older people said that of course it was Frank's business to sell all he could to a person who would pay ready cash, while the girls said that Miss Trait was a bold, assuming, crafty, hateful thing, and was merely making a plaything of a young man who ought to be old enough to have his eye-teeth cut and not to let anyone make a fool of him.

Public interest on the subject became so great that two apple-paring and one quilting bee were started in great haste so that there might be some good, big talks.

In the meantime Miss Trait, who was no fool, became immensely weary of her enforced stay in a village where she knew no one and found nothing to do. One day, while she was making some small purchases at the store, Chip Tyler dropped in for a moment, with his camera, and Frank asked him how business was. The young woman, after listening a moment, asked abruptly:

"Are you an amateur photographer?"

"I'm the only photographer of any kind in this whole country, ma'am," replied Chip with a pardonable pride.

"I've always wanted to learn something about it," said Miss Trait. "I wonder if I could employ you to teach me?"

"I'm ready for anything, ma'am, that means business," said Chip.

The lady made some inquiries of Frank Wiley, who said that Chip was a clever little fellow, and his studio was in his mother's own house, and that the boy had made some pictures which were not bad, so within an hour Chip was engaged, at the princely salary of a dollar an hour, to teach Miss Trait all he knew about photography.

She began by taking a picture of Miss Trait herself, telling her the meaning of each detail of the operation, and after the sitting he had her take a picture of her instructor. Then teacher and pupil went into the room, with windows screened with yellow paper, which Frank had called his studio, and Chip taught Miss Trait to "develop" a plate.

Chip began with his own portrait, which the pupil herself had taken, and it "came out" so well that the pupil was delighted and insisted upon holding the plate in the sunlight outside, so that it might dry quickly and be "printed."

Meanwhile Chip developed the plate of Miss Trait herself, in taking which she had been extremely careful, for it would be a great feather in his cap to display the portrait of so notable a person as a "specimen."

But the peculiar way in which that picture slowly came out in the developing "bath" made him wonder greatly. No other person had been near by when the picture was taken, but the shadows seemed those of a man instead of a woman. As the details appeared it became evident that he had used, by mistake, the plateholder containing a plate for which Frank Wiley had "set."

Well, never mind; he would finish it, and then pose Miss Trait again, on the plea that the plate was bad. But how oddly Frank's vest showed on the plate! Chip could not understand it.

Chip finally washed and "fixed" the plate, set it aside to dry and posed Miss Trait once more. The lady wished to develop it herself, of which Chip was very glad, for he wanted to print that picture of Frank, and find out what was the matter with it. He soon found out, for a print, taken quickly in the sunlight, showed that the matter with Frank's vest was that it was entirely covered by a face "as pretty as a picture" of Miss Trait! He had accidentally taken her picture on a plate which had already been used once, although not developed, and the effect was a print which—well, it looked as if Miss Trait had given her confidence and her heart to Frank Wiley and was resting her head on his breast.

Chip thought the picture very dreadful, that is, it might be, if his new pupil chanced to see it—so he made haste to hide the print, and also to put the printing frame and plate out of sight. But isn't it astonishing how things will persist in working just as they shouldn't, in spite of all you may do to prevent?

Miss Trait developed and dried her plate, and looked at it sideways, as Chip had taught her to do, and she greatly liked the expression, and was wild to take a print from the plate at once. Chip tried to empty the printing frame—his only one—without being seen, but Miss Trait's eyes had not been trained in a big city for nothing. It was quite plain to her that her youthful teacher was trying to hide the plate which he took from the frame, so she said:

"Let me see that plate, please."

"It's a spoiled one," said Chip, throwing the plate upon the floor. Up to that time he never had dropped a plate, no matter how lightly, without hearing the sound of breaking glass, but the dreadful plate of Frank Wiley and Miss Trait fell as solidly as if it had been a stone lid.

Chip stooped to get it, but Miss Trait was too quick for him; she got the plate and took it to the light, saying:

"What is it?"

"It's an awful blunder—that's what it is," replied Chip, in desperation. "I stupidly used a plate on which another picture had been taken, but not developed."

"How funny!" said Miss Trait. Then the lady insisted upon making a print from it, and Chip thought seriously of running away and never coming back to town again—but at least, until the Trait had departed. He got ready to run, and then from a corner of the house observed his pupil closely.

Miss Trait exposed the picture to the

light. Two minutes later he saw her shade it with her shoulders and look at it curiously. Then he heard her laugh.

Oh, that laugh! It seemed to Chip that her laugh gave him a new lease of life, for it was a merry laugh, and one of the long kind that seemed as if it didn't know how to stop. Chip thought it safe to go back to his room. Miss Trait joined him within a few minutes, and said, in a matter-of-fact way:

"Now I know how spirit photographs may be taken. I'll have a lot of fun with them when I go back home."

Chip was so grateful that he felt like falling at Miss Trait's feet, but he didn't do it; neither did he ever see that plate again, and he could not say that he was sorry at the loss. Still, being a boy, he could not help doing a lot of wondering.

Miss Trait really seemed to think the photographic mistake a good joke. How would Frank Wiley regard it? There was one way to find out. Chip toned and otherwise completed the single print he had taken from the offending plate. He bided his time, and one evening he showed it to Frank, at the store, telling him that it was one of the accidents of photography. Frank looked at the picture as if he doubted his own eyes, then he blushed and said:

"I'd give all my hopes of life for such an accident in earnest."

Stranger still, just such an accident finally came of it. The picture set the young people to thinking about each other a great deal, and made them rather awkward when they met, and each knew what the other was thinking about, so in the course of time Miss Trait became Mrs. Wiley, and Chip, in 'store clothes,' such as had never been seen in his native town, gave away the bride, for, as the bride herself said:

"If it hadn't been for that dreadful photograph we mightn't have learned to think seriously of each other."—Pittsburg Dispatch.

UNCLE SAM'S LIGHTNING ROD.
The Great Washington Monument and Its Aluminum Tip.

The Washington monument has once again demonstrated its apparent invulnerability to ordinary attacks of lightning. It has been struck several times by discharges of atmospheric electricity without sustaining any damage, due, probably, to the fine system of lightning arresters with which the shaft is provided. As is well known, the apex of the shaft is capped with a small pyramidal block of aluminum, and up to the last storm that cloud-piercing point had escaped the heavenly bolts of electricity that have almost constantly played around and about the tall, white column of marble. On a recent morning the city was visited with a heavy thunderstorm, accompanied by many strokes of lightning, and one of the most vivid of these struck the aluminum point. The impact was followed by the appearance of a ball of fire shooting down the lightning rods and disappearing in the earth. The visitation caused considerable excitement at the time, which was not allayed until it was ascertained that no casualties or serious results of any kind had occurred. The matter was reported to Col. Wilson, the engineer officer in charge of the monument, and the aluminum point was inspected, as well as could be done, with the aid of powerful field glasses and found to be wholly intact and unharmed.

The only way in which this belief can be thoroughly established, however, is by a personal inspection of the metal, and this can be done by sending a rigger up the outside of the shaft to its extreme tip, 550 feet from the ground. Whether this will be done will not be determined until later. Col. Wilson was compelled to leave the city on official business in New England and will not return for several days. The cap of the monument has not been examined since it was first put in place several years ago, and there is considerable curiosity to see how it has stood its long exposure to the elements in its lofty perch in the clouds. Its latest experience with the usually disastrous electric fluid will probably cause an examination to be made in the manner indicated, by sending a rigger up to the top of the monument just as was done when the aluminum point was put in position.—Architecture and Building.

Her Independence Threatened.
A republic that was fourteen centuries old when General Washington and his army were fighting the forces of King George III, including the hired Hessian contingent, is in danger of losing independence—the blessing which our colonial ancestors achieved in that memorable struggle. The wee commonwealth of San Marino, on the east side of the Apennine mountains, in Italy, by long odds the oldest of all existing republics, is threatened with this irremediable disaster. One of the provisions of the treaty under which Italy guaranteed the liberty of San Marino is to the effect that the republic shall coin no money, but adopt the coinage of Italy. But Italian money got to be very scarce in San Marino, and the little commonwealth, on the plea of absolute necessity, minted a limited number of gold and silver pieces for the use of the people. This did not disturb the parity, but it fractured the treaty, and Signor Crispi, the Italian prime minister, proceeded to annul the guaranty of independence. This means the merging of San Marino into the kingdom of Italy. As the republic is too weak for successful resistance, she will probably yield to this harsh decree of cruel fate.—Washington Post.

Two Big Land Owners.
Henry Miller and Charles Lux, cattlemen, of San Francisco, confess to owning more than 14,000,000 acres of land in three States. This estate is as large as Greece with the Ionian Isles. It is four times the area of Alsace-Lorraine, over which France and Germany fought. It is but little smaller than Ireland, and half again as large as Switzerland. It is twice as large as Belgium and one-third the size of England and Wales together.—Westminster Gazette.

They Build Great Structures.
The largest structure on the earth, when compared with the size of the builders, is the ant hill of Africa. Some of these mounds have been observed fifteen feet high and nine feet in diameter. If a human habitation were constructed on the same scale it would be more than seven miles high.

A "low descending sun"—one that treats his father disrespectfully.

CHAS. A. RAGGIO. JAS. D. MORRISON.
RAGGIO & MORRISON,
Wholesale Dealers and Jobbers in
FOREIGN AND DOMESTIC FRUITS.
127 South Water St., CHICAGO.
Telephone Main 2042.

F. C. VIERLING, President.
Chicago Rubber and Mill Supply Co.
MANUFACTURERS AND DEALERS IN
FINEST QUALITIES OF
MECHANICAL RUBBER GOODS
OF EVERY DESCRIPTION.
GENERAL RAILWAY AND MILL SUPPLIES.
Pure Oak Tanned Leather Belting.
312 Dearborn Street, CHICAGO.
Telephone Harrison 318.

The Best of Everything for Chicago.
The Civic Federation OF CHICAGO.
Telephone Main 2502. 517 First National Bank Building.
WILLIAM T. BAKER, President.
BERTHA MONROE PALMER, First Vice President
JOHN J. McGRATH, Second Vice President.
RALPH M. EASLEY, Secretary.
EDWARD S. DREYER, Treasurer.

The Civic Federation Aims to Focalize All the Forces Now Laboring to Advance the Political, Municipal, Philanthropic, Industrial and Moral Interests of Chicago.
Each Branch of Work is Placed in the Hands of a Committee of Specialists, Committees Now Being at Work on the Following Lines:
1.—POLITICAL. The selection of honest, capable men to govern the city. State and municipal legislation for Chicago. Honest elections. A general interest in the primaries.
2.—MUNICIPAL. Clean streets and alleys—prompt removal of garbage—improved urban traffic—less smoke—more water—honorable police—cheaper and better accommodations for the people of Chicago in all directions—elevation of railroad tracks, etc.
3.—INDUSTRIAL. Establishment of Boards of Conciliation, Public Loan Bureau, Employment Agencies, etc.
4.—PHILANTHROPIC. Development of the Central Relief Association to a thorough systematization of the organized charities of Chicago.
5.—MORAL. The suppression of gambling, obscene literature, etc.
6.—EDUCATIONAL. Ample school facilities—improved methods in teaching, and the development of a greater interest in the schools by the parents.

SIMON COGHLAN. P. J. WALL.
SIMON COGHLAN & CO.,
ROOFERS Felt, Composition and Gravel.
Office—341 Thirty-first St.,
Near State St.
Yard—3229-3231 Lowe Ave.
TELEPHONES: (South 998, Public, South 740.) Chicago.

JOHN H. SULLIVAN,
PRACTICAL
PLUMBER and GAS FITTER,
328 E. Division St., Phoenix Building,
Corner Sedgwick Street, CHICAGO, ILL.
RESIDENCE, 37 SISSL STREET.

Scientific American Agency for PATENTS
CONVEYING TRADE MARKS, SECURING PATENTS, OBTAINING RIGHTS, etc.
For information and free Handbook etc., send 10¢ to Scientific American, 7 Broadway, New York City.
Every answer is returned, and a free copy of the Handbook is given free of charge in the Scientific American.
Largest circulation of any scientific paper in the world. Published weekly, except two issues annually, which are double issues. Published by Scientific American, 7 Broadway, New York City.

WILLOW WARE
Wholesale Grocers
1111 N. Dearborn St., Chicago

Franklin MacVeagh. Wayne MacVeagh. Rollie A. Keyes. Walter T. Chandon.
Franklin MacVeagh & Co.,
... IMPORTERS ...
Manufacturers and Jobbers

GROCERIES.
Wabash Ave. and Lake St., CHICAGO.

W. M. HOYT COMPANY,
WHOLESALE GROCERS!
IMPORTERS AND JOBBERS OF
TEAS!
Nos. 1, 3, 5, 7 & 9 Michigan Ave. and 1 to 9 River Street, CHICAGO.

Gladiator Cycle Works.
Manufacturers of High-Grade Wheels.
The GLADIATOR.
Factory, 109 to 115 West 14th St.,
FRANK WENTER, Pres. CHICAGO.

HORN BROS.
Manufacturing Co.,
MANUFACTURERS OF
...Fine Furniture.
281 Superior Court, ...Chicago.

AL. SAMUELSON. ED. C. WESTMAN.
SAMUELSON & WESTMAN,
DEALERS IN
Furniture and Carpets,
Stoves, Office Desks, Mirrors, Etc.
Picture Frames Made to Order. Repairing on Short Notice.
143 and 145 East Chicago Avenue.

HENRY STUCKART,
DEALER IN
FURNITURE
Carpets, Parlor Goods, Crockery, Chamber Suits, Lace Curtains and Shades.
Telephone South 302. 2517-19 AROHER AVE.

WILLOW WARE
Wholesale Grocers
1111 N. Dearborn St., Chicago