THE STORY OF A FATHER AND SON

Or

"UNSCREWING THE INSCRUTABLE"

View of the present extensive works, showing side tracks, etc.

Elliott

Note

The "Works" picture on the cover and the pictures shown between the stories in this book are reprints from the humorous Elliott catalog of 1888.

The Story

OF A

FATHER *and* SON

OR

"Unscrewing the Inscrutable"

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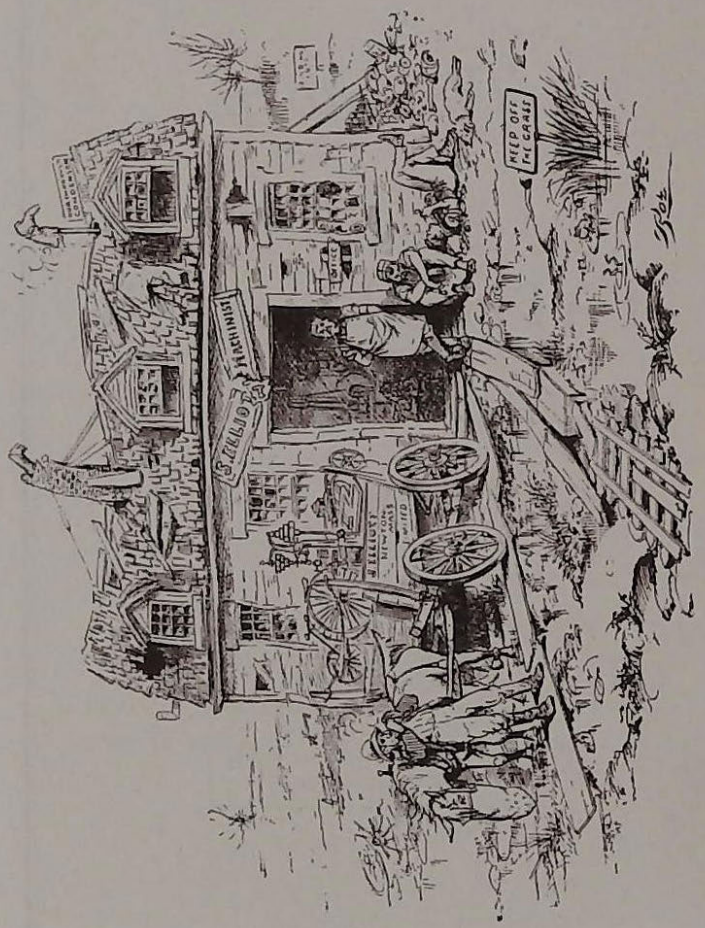


View of the present extensive works, showing side tracks, etc.

Sterling Elliott—1852–1922

Harmon Elliott—1887–

BEHIND every great invention you will find an interesting story. The keen public interest in the motion pictures that described the inventions of Robert Fulton, Alexander Graham Bell, Charles Goodyear and Thomas Edison inspired us to write this story of a few inventions made by a father and son named Elliott.

In 1874 Sterling Elliott's inventions put these men to work at Watertown, Mass. Today Elliott inventions give employment to thousands and profit to millions.

An Invention That Will Live Forever

EVERY automobile manufacturer knows that his automobile steering mechanism was invented by Sterling Elliott for this four-wheeled rubber-tired quadricycle in 1887.

But very few automobile manufacturers know that the Sterling Elliott steering mechanism (which made the automobile possible) was invented because Mrs. Sterling Elliott rode this Elliott quadricycle around a *dance floor*.

Here is the story:

In 1888 Sterling Elliott built a large hall with a hardwood floor in which people could learn to ride his bicycles.

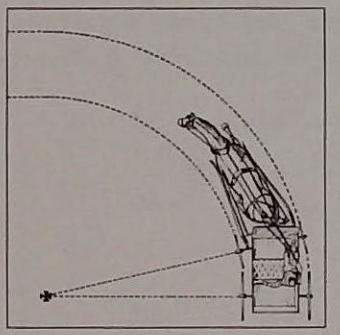
One night the Elliott employees had a dance party in this hall and waxed the floor for dancing.

The next day when this quadricycle made turns on this waxed floor a loud screeching noise was caused by its hard rubber tires.

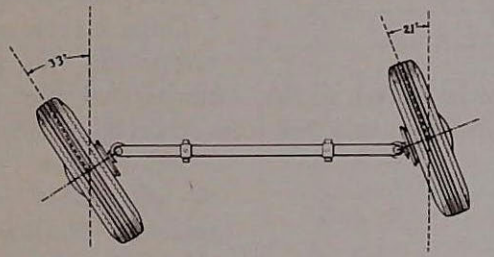
Sterling Elliott's study of the cause of that screeching noise resulted in an invention so simple and yet so perfect that it will live forever.

To understand this invention you must first understand the difference between the front axle of a horse-drawn vehicle and the front axle of an automobile.

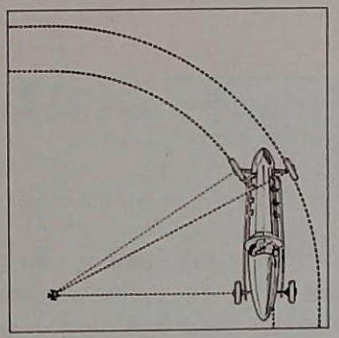
With a horse-drawn vehicle the shafts and front axle turn with the horse.



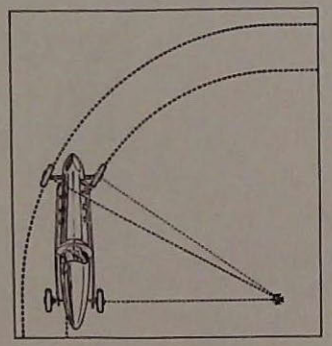
But Sterling Elliott's quadricycle had a *non-turning* front axle and he was the first man in the world to discover that when making a turn with a *non-turning* front axle the two front wheels must be turned a different amount.



When turning to the left, the left front wheel must turn more than the right front wheel, because the left front wheel must travel in a smaller circle than the right front wheel. (In fact, the left front wheel travels a circle that is 56 inches smaller in radius than the circle

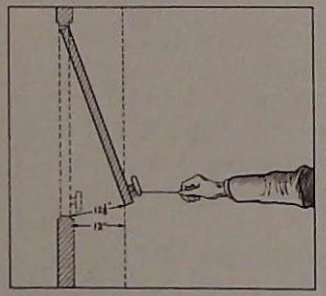


travelled by the right front wheel, if the track or tread of the automobile is the usual 56 inches wide.)



But when turning to the right, the right front wheel must turn more than the left front wheel because the problem is now reversed and it is the right front wheel that must travel the smaller circle while the left front wheel travels the larger circle.

Other bicycle manufacturers said this problem could not be solved, so they manufactured three-wheeled velocipedes with only one front wheel to be steered.

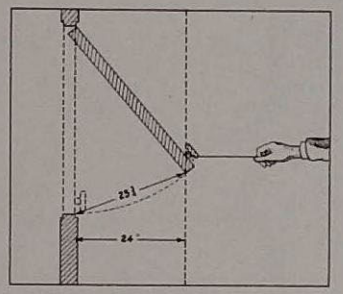


We will now "unscrew the inscrutable" and tell you how Sterling Elliott solved this problem.

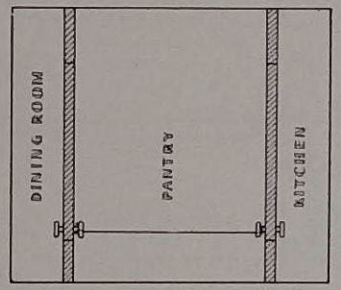
He tied a string to the door knob of a swinging door and pulled the string exactly 12 inches at right angles to the wall, and noticed that the door had opened 12⅛ inches.

Then, still pulling the string at right angles to the wall, he pulled it another 12 inches, and noticed that the door had opened another 13⅝ inches.

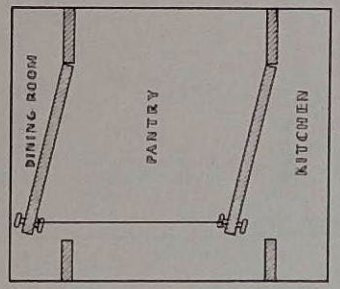
The fact that the door opened 13⅝ inches on the second 12-inch pull and had only opened 12⅛ inches on the first 12-inch pull, revealed a solution of the problem to Sterling Elliott's keen mind, but to explain his idea to his associates he used two swinging doors.

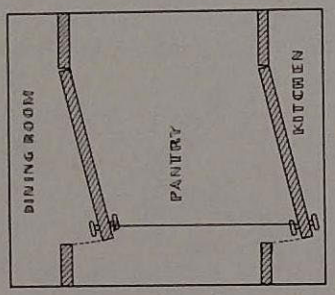


He first tied these doors together, while the doors were parallel, like this—

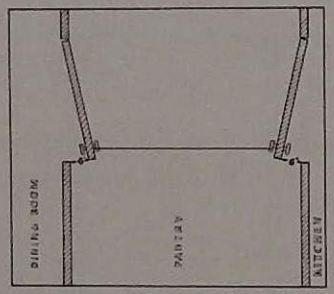


He then swung them to the left, like this—

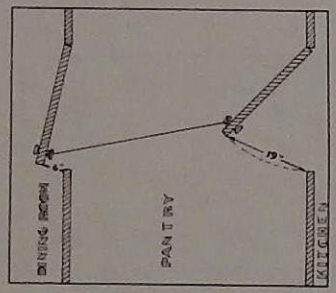




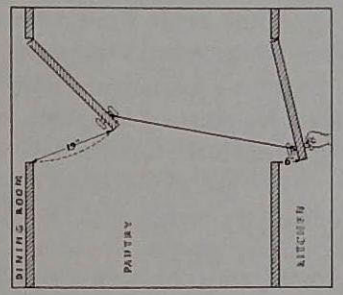
He then swung them to the right, like this, and said, "You see if you tie them together *when they are parallel* they both swing exactly the same amount."



He then shortened the string so that the doors were at an angle to each other, like this—



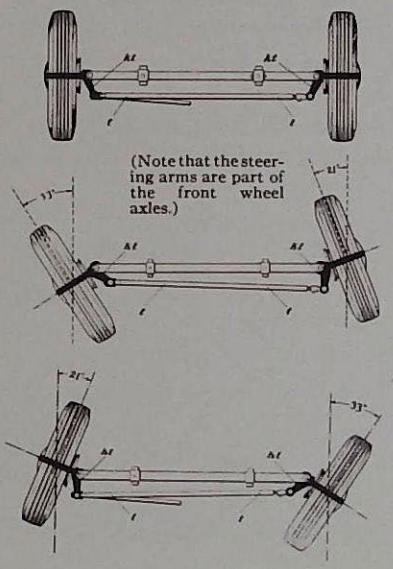
Then he pulled the left door to the left and called attention to the fact that the string had pulled the right door further to the left than he had pulled the left door.



Then he pulled the right door to the right and the string pulled the left door further to the right than he had pulled the right door.

His next step was to set the steering arms of his quadricycle front wheels at an angle to each other (like the pantry doors) and fasten them to each other with a metal tie rod (just as his doors had been fastened to each other by the string).

His front axle construction looked like this:



KT and KT are the steering knuckles. Notice they are set at an angle, just like the pantry doors.

TT is the tie rod (that ties the steering arms together just as the string fastened the pantry doors together.)

And his wheels now did just what his swinging doors had done—the *left* front wheel turned *more* than the right front wheel when the tie rod TT was pulled to the right.

And the *right* front wheel turned *more* than the left front wheel when the tie rod TT was pulled to the left.

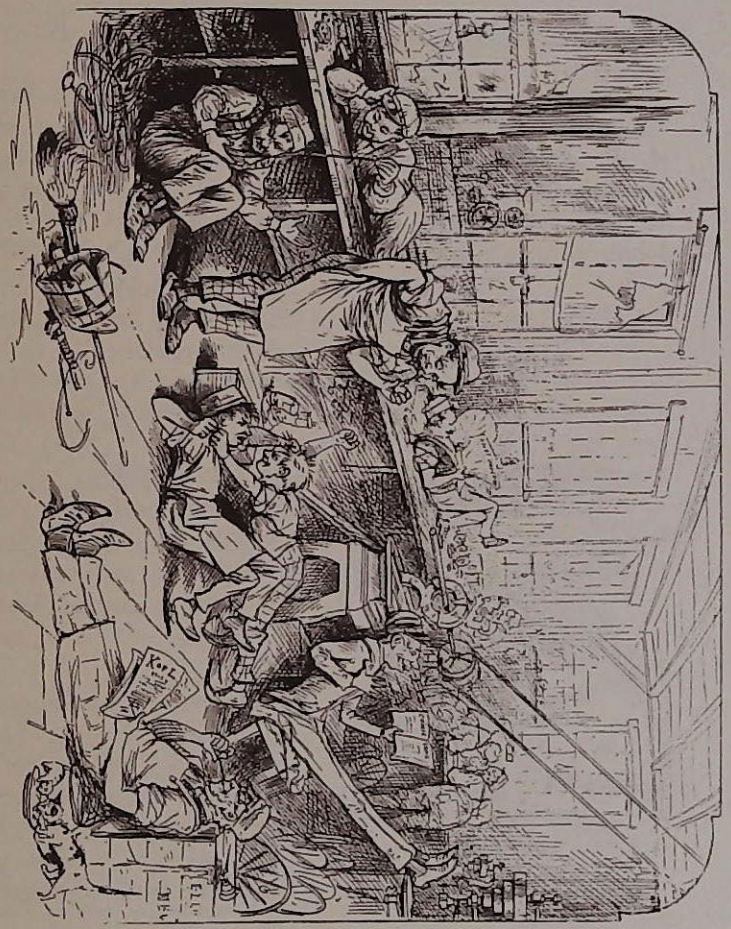
He next experimented with the amount of angle at which to set his steering knuckles, until he discovered the exact angle necessary to keep both wheels always at right angles to the radius of the circle they were turning.

In all the annals of the Patent Office, with its more than 2,000,000 patents, there is no record of so great an accomplishment by such a simple expedient.

Every schoolboy is smart enough to realize that without the gas engine and the pneumatic tire the automobile of today would not be possible.

But the steering knuckle set at an angle to the front wheel *is the secret of the success of the automobile*.

Because this Sterling Elliott invention will be just as necessary in 9940 A.D. as it is in 1940 A.D., and because no one will ever simplify it or improve upon it, the name of *Sterling Elliott* will live forever because of it.

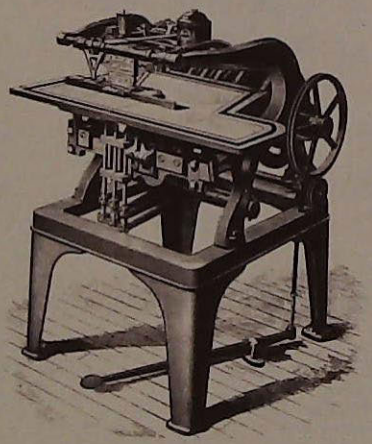


View in the "assembling" room.

The First Machine That Ever Tied a Knot

ALTHOUGH Sterling Elliott did not invent the first sewing machine, he invented a machine that required vastly more inventive skill than the sewing machine, for a sewing machine was only an evolution of the loom and simply weaved the bobbin thread through the loops of thread which the needle pushed through the cloth.

What would you think of a sewing machine that could automatically tie a square knot like this after it had finished a job of sewing?



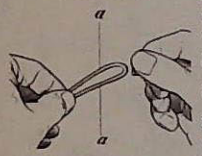
Sterling Elliott spent nine years perfecting this pamphlet stitching machine. *It not only stitched pamphlets but tied the thread automatically on each pamphlet.*

When the great Thomas Edison saw this machine he wrote a letter to Sterling Elliott and invited him to come to Menlo Park, saying: "I want to shake the hand of a genius."

But before Sterling Elliott invented this knot-tying machine, he had to invent this new and much simpler way to tie a double square knot.

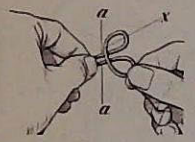
Sterling Elliott humorously complimented the preaching of William Savage of the First Unitarian Church of Watertown, Mass., saying it was during one of William Savage's sermons one Sunday morning while he sat in his high walled box pew experimenting with a piece of string that he learned to tie the knot in this new and simple way.

Position 1



A simple loop.

Position 2

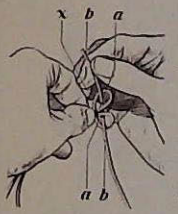


Loop X has been laid back on AA.

Henry Dennison, the founder of the Dennison Manufacturing Co. of Boston, remarked when he saw this machine:

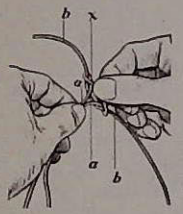
"What a pity that a man with the genius to build such a machine could not find time to learn that during the nine years he had shut himself up in a room with this great mechanism a much simpler machine had been made to bind pamphlets with wire staples."

Position 3



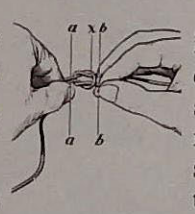
Thread BB has been brought through both loops.

Position 4



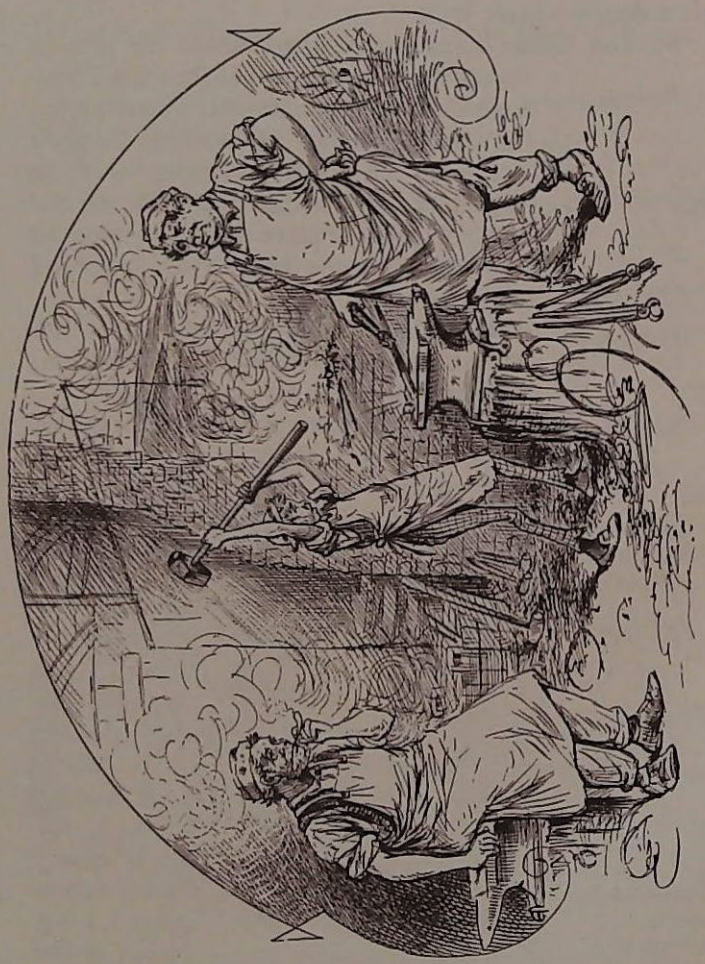
Loop X is brought over to its original position again.

Position 5



And the knot is completed.

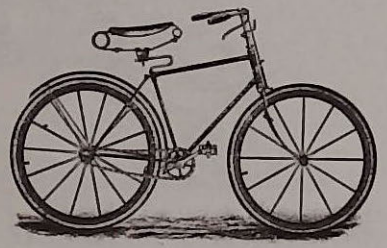
But Sterling Elliott derived more satisfaction from "putting salt on the tail of ideas" than from putting money in the bank.



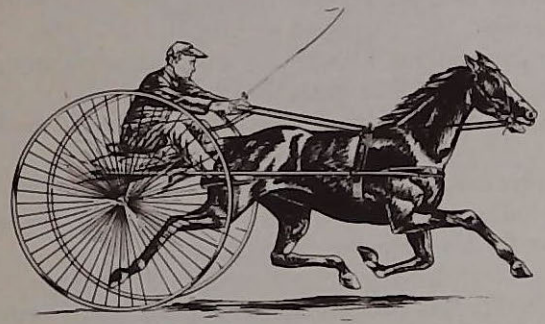
In the smith shop we give apprentices every opportunity to become familiar with the work.

Sterling Elliott Invented the Low-Wheeled Trotting Sulky

THIS shows the first pneumatic-tired bicycle built by Sterling Elliott at Watertown, Mass., in 1894. It sold for $115.00.

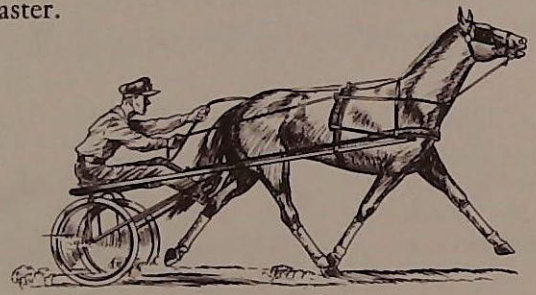


And this shows a trotting horse with the trotting sulky that was used prior to 1894.



In 1894 Sterling Elliott visited the old Waltham, Mass., horse trotting races, and, after watching these high-wheeled iron-tired sulkies "shimmy" as they came around the turns, Sterling Elliott went to Bud Doble and told him

he would take the two wheels from an Elliott bicycle and build for him this sulky that would enable horses to trot faster.



Encyclopedias record the fact that with this Sterling Elliott trotting sulky Bud Doble in 1895 drove the world's champion trotting mare, "Nancy Hanks", against her own time for the one mile trotting record, *and this new sulky enabled her to lower her own world's record by more than seven seconds.*

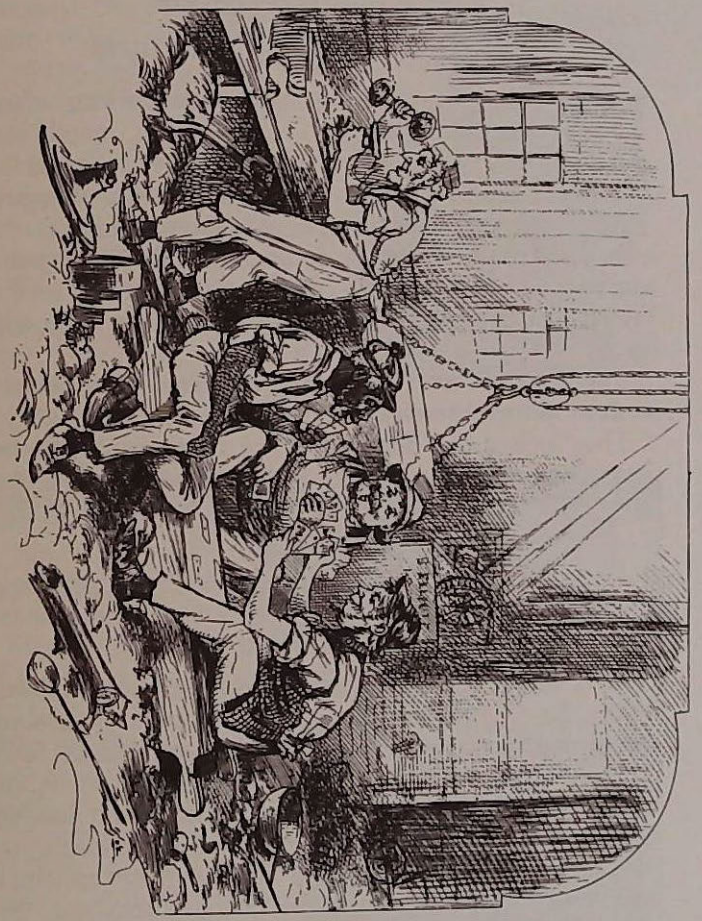
The demand for Elliott low-wheeled pneumatic-tired trotting sulkies was so great that the Elliott factory ceased the manufacture of bicycles until the sulkies of the world were replaced with this new Elliott invention.

The great agnostic, Robert G. Ingersoll, prosecuted this Elliott sulky patent and charged Sterling Elliott $1,000.00 per day for his eloquence in court.

When commenting on the number of feet per second that "Nancy Hanks" had travelled, Ingersoll remarked to Elliott, "That was a hell of a fast gait."

Sterling Elliott said, "I thought you did not believe in a hell."

Ingersoll smiled and replied, "I don't, but the more I see of some people, the more I realize the need of a hell."



View in foundry during the progress of a heat.

The Invention of the Elliott Addressing Machine

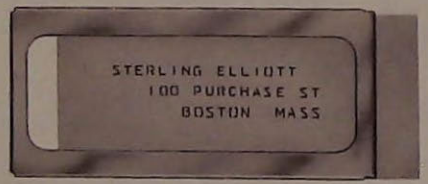
In 1896 Sterling Elliott became owner-editor of the "Bicycling World".

In 1897 he went to New York City to buy an addressing machine to address his 112,000 weekly wrappers.

After studying the various addressing machines that were then on the market, he decided he could build a better addressing machine than he could buy, so he came back to Watertown, Mass., and made the first Elliott addressing machine in 1898.

The first Elliott addressing machine used address cards with metal frames.

They looked like this—



and printed addresses that looked like this—

STERLING ELLIOTT
100 PURCHASE ST.
BOSTON MASS.

After he had made and sold 80,000,000 metal address frames, Sterling Elliott became disgusted with the bending and rusting and weight and smudge of metal frames. So he invented a laminated fiber "Plastikote" frame, which, unlike metal, can be made in many different colors; and, unlike metal, can be printed and written upon for index purposes; and, unlike metal, will flex without remaining bent, thus forever silencing the famous complaint "my addressing machine has stalled because a bent metal address plate has jammed in it."

To cut addresses in these address cards, Sterling Elliott invented this punching machine which was the first punching press to punch out characters without using a female die.

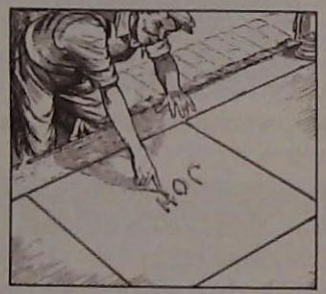
This punching machine used only male punches (10 for the numerals and 26 for the alphabet).

The address card rested on a strip of hardened fiber into which the characters were pressed one by one by the male punches. The fiber strip moved one eighth of an inch after each letter was punched in it.

Note that each letter is readable from left to right in this "punching strip" because the punched-out characters were imbedded in this strip as it fed through the punching press.

Harmon Elliott remembers one evening when at the age of ten he held a piece of paper on a slab of lead while Sterling Elliott cut his *first* address card by tapping each alphabet punch like this with a carpenter's hammer by the light of a kerosene lamp in the engine room of the old Elliott factory at Watertown, Mass.

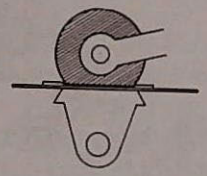
But the famous Elliott "dieless" punching press is now a thing of the past because the modern Elliott address card has its address stencilled into it (like this) by any regular correspondence typewriter.



The *durability* of the modern Elliott stencil is mentally pictured when you compare this picture of a finger writing a name in soft cement with this microscopic photograph (enlarged many times) which shows the impression of the letter "O" made in the gelatine coating of an Elliott address card with a typewriter.

Like soft cement, the *temporarily* softened gelatine coating has been spread aside by the face of the typewriter type, but in a few minutes this coating, which was temporarily softened to make it plastic, will harden and become as permanent as cement becomes when it hardens.

So permanent, in fact, that an Elliott address card surprised the United States Bureau of Standards by making more than 200,000 impressions of its address in an official test at Washington, D. C., and every Elliott address card is *guaranteed* to print 10,000 addresses.



This shows how an inked rubber roller and a flat metal anvil squeeze an Elliott address card against an envelope with great pressure (as in a vise), so that the ink from the surface of the rubber roller will pass through the stencilled characters to print an address on the envelope.

One of the addresses shown below was typewriter typed through a ribbon directly upon an envelope.

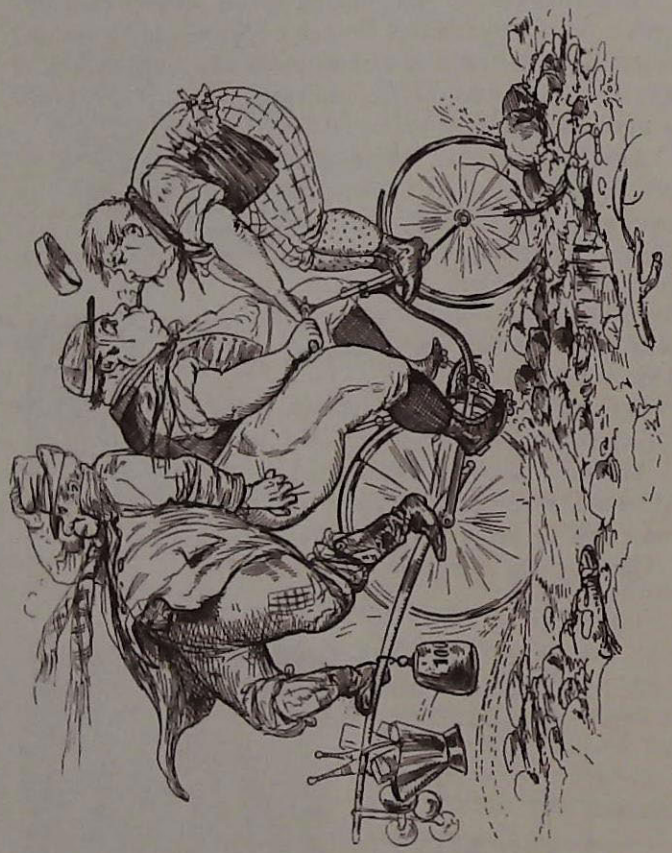
The other address was printed by an Elliott Addressing Machine through an Elliott address card which was stencilled *by the same typewriter*.

Can you tell them apart?

The Elliott Company
143 Albany Street
Cambridge, Mass.

The Elliott Company
143 Albany Street
Cambridge, Mass.

Here are a few clues. Compare the "M" in Mass. and the period after Mass. and the word "Street."



Our corps of merciless inspectors testing the *Elliott Hickory Wheels.*

Sterling Elliott Trumps His Competitor's Bell-Ringing Invention

A GAS and electric light company in New York State was about to buy Elliott's competitor's addressing machine because it would ring a bell every time a gas customer's address came into addressing position. This bell was to warn the operator to skip such addresses.

Sterling Elliott contended that with the Elliott addressing machine they could use a different colored address card for all gas customers, which different color would be visible to the operator, so it would be very easy for her to skip all address cards of this color.

But the utility company said they preferred the bell-ringing attachment and if Elliott could not deliver a bell-

ringing addressing machine in sixty days they would buy the competing machine.

With very evident disgust, Sterling Elliott had a machine put in his private workshop and for 58 days let no one see what he was doing.

But late in the afternoon of the 58th day the Elliott sales manager and advertising manager and Harmon Elliott were invited up to Sterling Elliott's private workshop to see the machine before it was shipped.

Imagine their amazement when Sterling Elliott announced that the machine would not ring a bell but would *automatically* skip all gas customer address cards.

And he was so sure it would work that he started putting on his coat and hat and said he would not wait to see the final test.

When Harmon Elliott asked what should be done if it failed to work, Sterling Elliott replied:

"That reminds me of a story they used to tell of what the American commander said to his men before the battle of Bunker Hill.

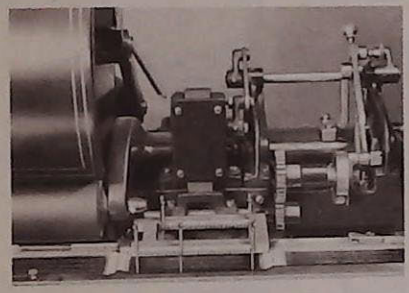
"They claim he told them there was only enough powder to repulse the British three times, so if the British reformed their lines and started up the hill the fourth time they would have to retreat to Cambridge, and added, 'Of course you will have to run fast

to save your lives, and since I am kind of old and lame I will run along now.' "

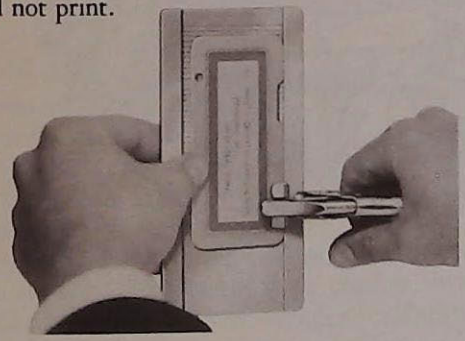
Humorously saying that he also felt "kind of old and lame", Sterling Elliott actually went home and did not even wait to see the final test of one of his greatest addressing machine inventions.

Needless to say, bell-ringing addressing machines quickly became a thing of the past.

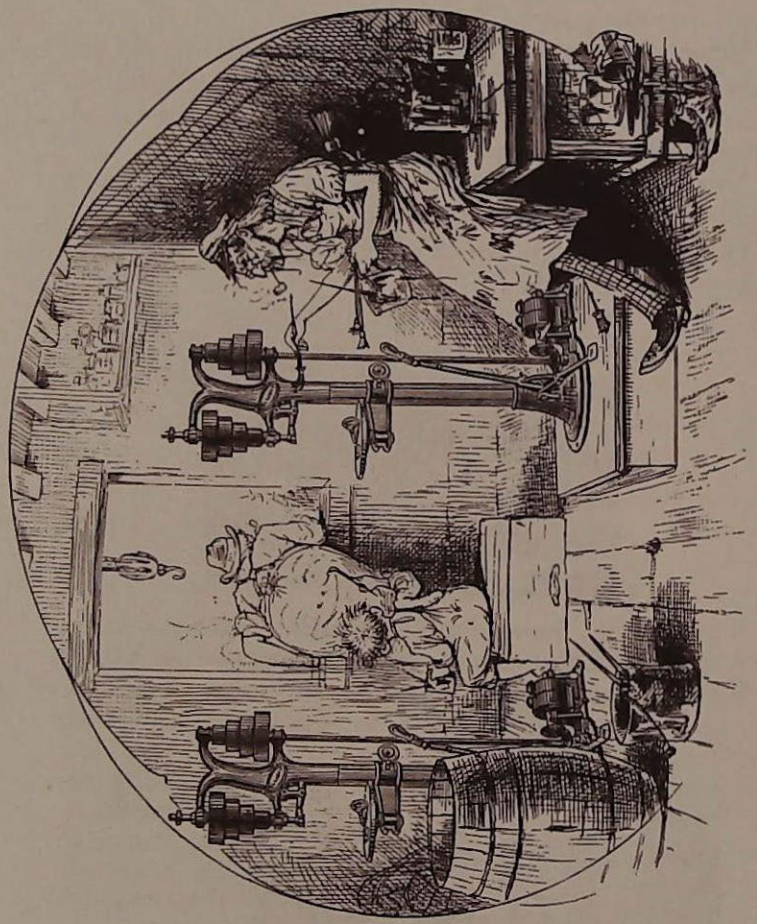
Here is a brief description of Sterling Elliott's "address selecting" invention:



If a hole in the frame of an Elliott address card is entered by one of these pins, that address will print, otherwise that address will not print.



Stencil Punch for accurately punching selector holes in the frames of the Elliott address cards.



All work is painted "on the spot" by our "special artist."

Harmon Elliott Makes a Machine That Addresses Five Times Faster Than Other Addressing Machines

From 1898 until 1928 the Elliotts had never been able to build a simple and sure automatic feeding device to feed envelopes into and out of addressing machines.

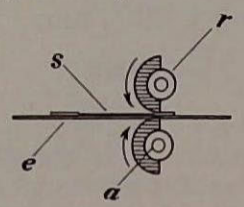
Many complicated and high-priced machines were built, but they were erratic and so expensive that only the largest addressing machine users could afford them.

One Monday morning, on his way to work, Harmon Elliott passed through his kitchen and noticed the washwoman turning an old-fashioned hand-crank clothes wringer.

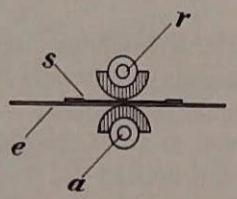
As he was driving down to the factory that morning he conceived the idea of making an addressing machine that, instead of squeezing a stationary address card against a stationary envelope, as you would squeeze them together in a vise, would squeeze the address card and envelope together as they would be squeezed together by running them through a clothes wringer.

So Elliott's "clothes wringer" addressing machine was

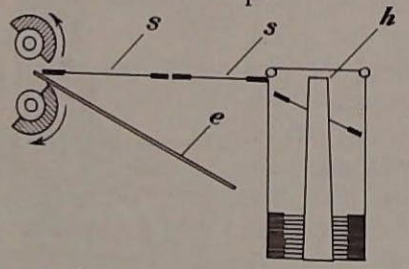
built, but instead of its rubber ink roller and anvil roller being completely round like a clothes wringer, they were segment shape.



The address stencil (s) and the envelope (e) automatically fed between the inked rubber printing roller (r) and the co-acting metal anvil roll (a) *simultaneously and superimposed.*



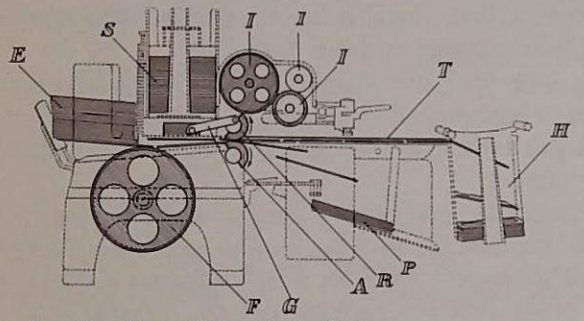
Then as the hand-crank turned, the two segment rolls squeezed the address card and envelope together as they simultaneously fed them through and out of addressing position, causing the ink on the surface of the rubber roll R to press through the stencilled characters onto the face of the envelope.



This construction permitted the addressed envelope (e) to drop out of the machine by gravity as the address card (s) moved along its track, from which it dropped by gravity into the hopper (h).

After the completion of each revolution the segment rolls (r and a) were again in their open position to receive the next address stencil and envelope.

Here is a simple description of Harmon Elliott's famous "clothes wringer" addressing machine:



E is the pile of unaddressed envelopes.
S is the pile of address cards.
R and A are the segment rolls.
P is the pile of addressed envelopes.
H is the hopper that catches the address cards.
F is the feed wheel that feeds the bottom envelope at each revolution.
G is the crank lever that feeds the bottom address card at each revolution.
I-I-I are the ink rollers that ink R.
T is the track along which the address cards travel to the hopper H.

Because of its ridiculously simple construction, this is a faster and vastly surer addressing machine than the world has ever seen or imagined possible.

It is five times faster than any machine in its price class.

It can be and is sold for $135.00.

The lowest-priced competing automatic feed addressing machine sells for $770.00.

It is so simple and sure in operation that it makes addressing machines that require the hand feeding of envelopes look foolish.

When this little automatic machine was first perfected, Harmon Elliott arranged for its unveiling at a convention of Elliott salesmen in New York City.

So with his Sales Manager, Advertising Manager and Factory Superintendent he took a train for New York and took this little machine right along with him in the Pullman car.

When they arrived at Grand Central Station in New York, Harmon Elliott was afraid to let the Pullman or station porters carry this precious machine and so he asked one of his own men to take it to the taxicab.

But the elation and enthusiasm over this great new Elliott invention had called for a celebration on the train, which accounts for the fact that as the crowd walked up the ramp a loud noise caused everyone (but Harmon Elliott) to laugh as the precious machine fell on the concrete.

But the pieces were carefully picked up and the machine put in working order in time for the "unveiling" where Harmon Elliott invited everyone to turn the crank as fast as possible and receive a prize of a new hat if they could make the machine miss or jam.

When telling of the exclamations of astonishment and applause which he received at that meeting Harmon Elliott remarks that if a business "promoter" or "capitalist" could ever experience the thrill of such an accomplishment he would never again speak of a "poor inventor".

All our work is built from the most carefully prepared plans, the draughting-room being in charge of just that kind of a man.

Extract from "The Story of Their Private Lives"

DURING the last thirteen years of Sterling Elliott's life, Sterling Elliott and Harmon Elliott were always together.

When asked to explain how the father and son attitude had changed into a brotherly relationship, Harmon Elliott gives all the credit to Sterling Elliott, and adds:

"When I was ten years old my father had a very serious talk with me on the evils of tobacco and alcohol which he had never used in any form and promised me $2,000 on my 21st birthday if I would be a total abstainer until then.

"On February 18, 1908, he congratulated me on the fact that I had legally become a man and asked me if he owed me $2,000.

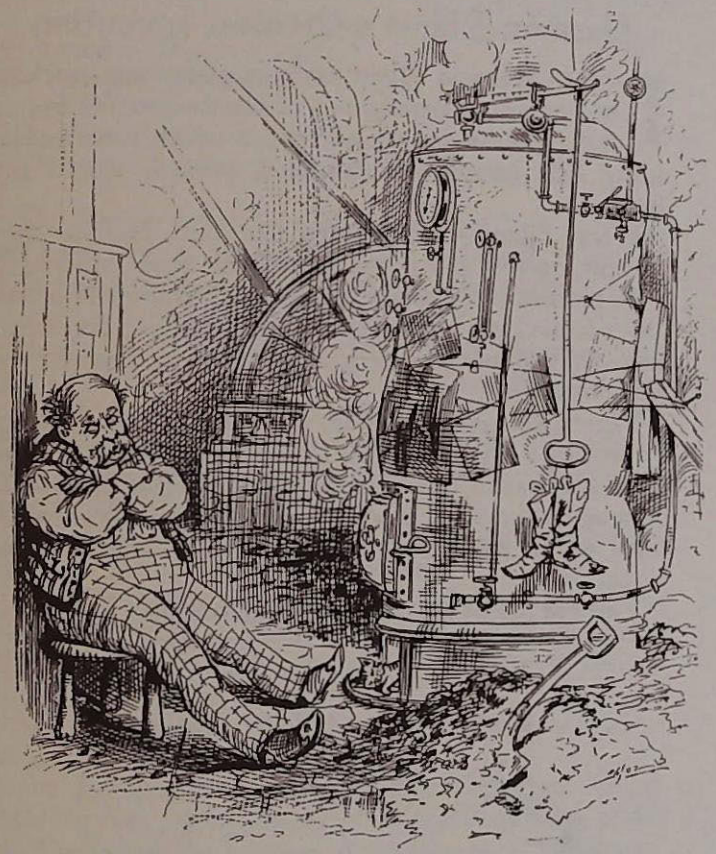
"I told him that I had smoked cigarettes and cigars and a pipe and had even chewed tobacco once to see what it tasted like and I had tried every drink on the wine list.

"I believe his answer that day was the beginning of our brotherly relationship and the end of the father and son attitude.

"He said:

" 'I admire your honesty and truthfulness. In fact, I appreciate your confidence so much that *if I had $2,000 I would give it to you.*'

"The hand-shake and laugh that followed that talk was a farewell to youth and a welcome to partnership—as happy and as fruitful a partnership as the old Town of Boston ever knew."



Engine-room.

Harmon Elliott's Greatest Invention

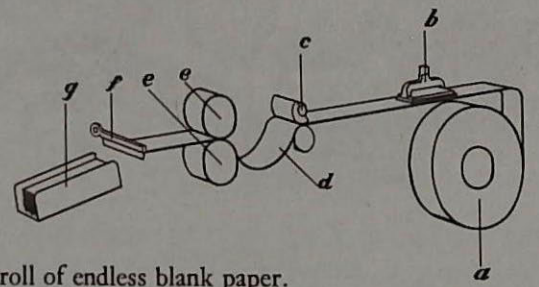
In 1928 Harmon Elliott built an addressing machine into which an endless web of blank paper fed from a roll of blank paper and out of which came public utility bills completely addressed, printed, scored and dated.

When Elliott's competitors saw this machine they brought a patent suit to try to stop him from building it.

To prosecute this patent suit, which was brought before the Federal Court in Cleveland, Ohio, Elliott's competitors imported high-priced patent attorneys from Chicago and New York City.

They were trying to upset the Harmon Elliott patent by proving to the Court that a patent many years prior to the Elliott patent had described a mechanism that would print and address and chop off bills from an endless roll of paper just as perfectly as Harmon Elliott's new machine would do it.

This old patent described this mechanism—



A—A roll of endless blank paper.
B—An addressing mechanism which required that the web of paper be stationary while each address was printed.

C—An intermittent feed to pull the web of paper to the left a few inches after each address was printed by B.
D—A loop of the web of paper.
EE—A rotary printing device which ran *continuously* and printed the utility bills "in register with the address".
F—A knife to sever the finished bills from the web.
G—A hopper in which the finished bills dropped.

The famous patent attorney from New York City told the Judge that Elliott's competitor had made a machine according to this old patent and had it running in a room near the court-house.

He told the Judge that if he would go to this room with all the lawyers and witnesses they could quickly convince him that the machine would run perfectly, and of course Harmon Elliott was not entitled to a patent if a machine made according to this old patent would do exactly what Harmon Elliott's machine would do.

The Judge decided that the entire court and lawyers and witnesses should accept this invitation.

When everyone was gathered around this machine, the plaintiff's expert mechanic carefully showed the Judge that the machine was made exactly according to the old patent.

And then they turned on the electricity *and the machine ran perfectly*.

The roomful of witnesses glanced at Harmon Elliott about the way the spectators at a murder trial look at the murderer when the foreman of the jury says, "Guilty of murder in the first degree".

Harmon Elliott says he will always remember the grin on the face of one man who was standing on tiptoe so he could better observe how Elliott received this shock.

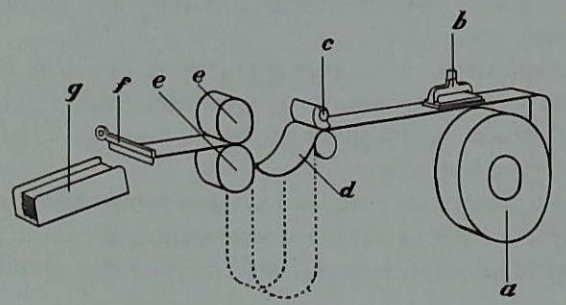
When the Judge asked Elliott what he had to say you could hear a pin drop as Elliott knelt down and looked under the machine where he quickly saw how it had cleverly been made so that on every machine revolution the loop of paper (D) was completely consumed by the rotary printing rolls (EE).

This allowed the printing rolls (EE) to pull just enough *more* of the web of paper through (C) and (B) to conceal the fact that (C) did not feed into the loop (D) exactly the same length of paper that (EE) consumed out of the loop (D) at every machine revolution.

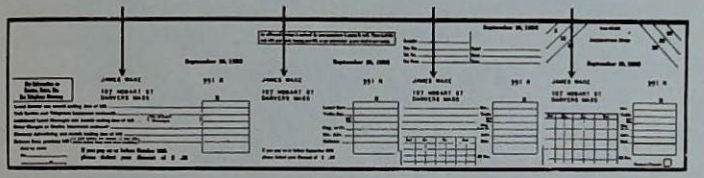
No one in the room knew that Harmon Elliott had spent three years trying to make a machine of his own exactly like the mechanism of the old patent and had learned that two separate feeds on the same web of paper could not be made to feed exactly alike.

His three years' experience enabled Harmon Elliott to quickly perceive that his competitors had played a trick on the Judge, *and a trick that he could very easily expose right then and there.*

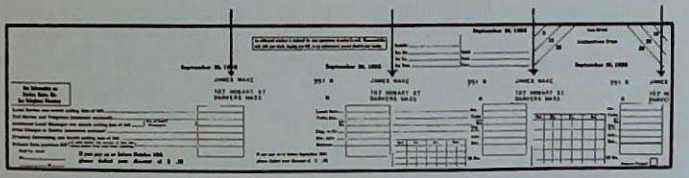
With the Judge's permission, Elliott drew the web of paper through (B) and (C) until there was more paper in the loop (D), as shown by the dotted line on this picture—



When the electricity was again turned on, the fact that (EE) was feeding more paper out of the loop (D) than (C) fed paper into the loop (D) was instantly apparent because the loop of paper (D) diminished in size as the machine ran and although the first bill printed like this (note addresses are in perfect register with the printing)—



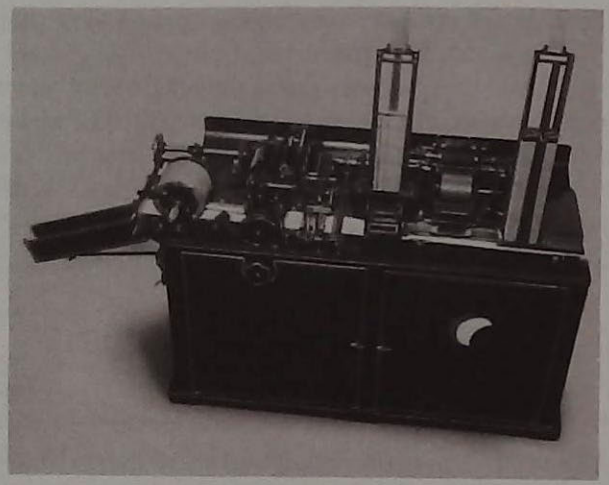
the addresses on each succeeding bill were increasingly out of register with the printing until the bills came out like this—



(Note that the four addresses are so far out of register that one address has been chopped in the middle by the knife.)

Harmon Elliott says his only memory of that moment was the slight lift of the Judge's eyebrows and the very evident confusion of the conspirators.

Then Elliott explained to the Judge why it is a mechanical impossibility for two separate feeds to feed alike, and how after three years he had discarded his first experimental *double* feed machine and had invented the *single* feed Elliott Bill Printer.



Here is the Harmon Elliott machine.

In this machine the endless web of paper runs *continuously* through the Rotary Printing Mechanism, but *this same web of paper* stops *dead still* 200 times *per minute* for the addresses to be printed upon it.

X

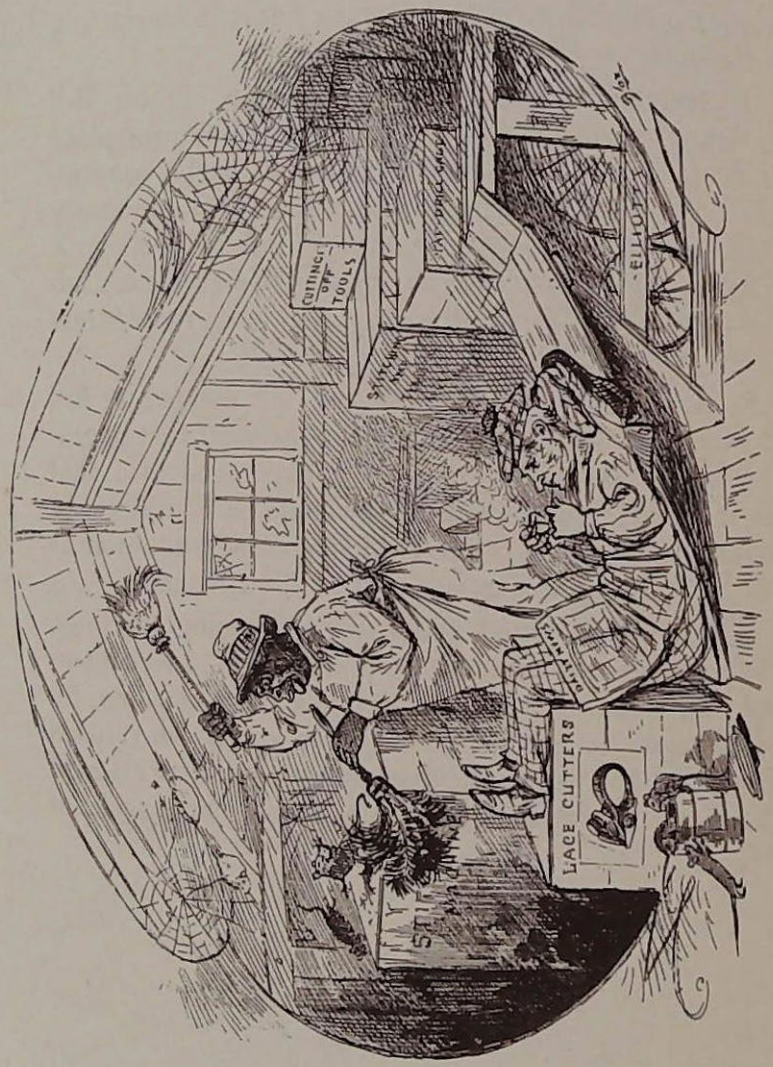
To see how simply Harmon Elliott accomplished this amazing result, take a piece of string and pass it through button holes (for tension), as shown. Then, while you pull it very slowly with your left hand, keep raising and lowering the string between the button holes with the index finger of your right hand.

Note that while the string above your finger is continuously moving, the string below your finger has a starting and stopping movement.

To thoroughly understand the Harmon Elliott Bill Printer, imagine an endless web of paper taking the place of this string and substitute for your left hand a continuously running rotary printing mechanism that continuously pulls the web of paper along as it prints it. Then at X imagine an addressing mechanism that squeezes each address card against this web of paper to print the address whenever the paper stops dead still at X.

Because Elliott won this law suit, all competing bill printing addressing machines must at the very first operation sever the bills from the roll of paper and then skid the individual bills through the machine on continuously running tapes, which is a very delicate operation and at best is about one half as fast as the Elliott machine.

When Harmon Elliott heard that competing salesmen were claiming that this old "skid and bump" mechanism was better than the new Elliott endless web machine, he told of a fox that had his tail cut off in a trap, but refused to admit he had had an accident and forever after claimed that all other foxes should join him in the "new style of bang-tail."



Shipping-room.

Elliott Gambling

From 1898 until 1928 (because of conflicting patents owned by three competing addressing machine manufacturers) no *stencil* address card could be made sufficiently durable for business concerns which required an address card that would last "forever."

So during these thirty years many thousands of businessmen adopted *all metal* address plates which, in spite of their many disadvantages, were durable.

But in 1928, Harmon Elliott bought all these conflicting patents *which enabled him to produce a Plastikote typewriter stencilable address plate that is more durable than a metal address plate.*

The low price of this new Elliott Plastikote address plate and the high speed of the new Elliott automatic self-feeding addressing machines, so tremendously decreased mechanical addressing costs that Harmon Elliott instructed his salesmen to solicit concerns that already owned the very largest and most modern metal address plate addressing equipments.

And he instructed Elliott salesmen to offer to install a complete Elliott Addressing Equipment to replace any metal address plate addressing equipment, with a *written* guarantee that The Elliott Co. would take back the Elliott equipment at the end of two years if as a result of two years' use it had not convinced the user that it was an investment that he wanted to make.

A large proportion of Elliott's total output of addressing machines are now "sold" in this way.

"Up or Down" versus "In and Out"

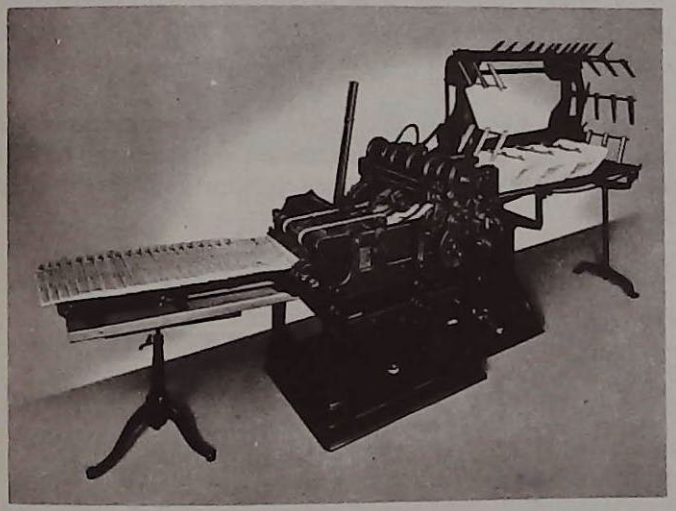
When describing this scheme as gambling, Harmon Elliott says:

"Other men gamble that things will go *up* or *down* but I gamble that if one of my inventions goes *in* it will never come *out*."

With the *Elliott Cutting-off Tool* stock may be quickly cut, even though it be much longer than the lathe.

An Elliott Invention For Publishers

For about thirty years huge, costly addressing machines ($4,000 to $8,000) have delivered addressed magazines and newspapers on a long, slow-moving belt so that the addresses on the margins will be visible to the bundlers, like this—



Harmon Elliott noticed that it required many bundlers to keep up with these machines, because all the addresses for each different town must be picked out and shucked together and bundled separately.

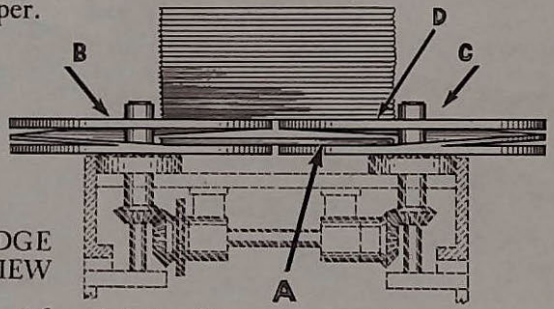
As he watched one of these machines in operation he said, "Why *read* addresses when a hole in the first address card for each town could mechanically print a mark on the

edge of the first publication addressed for each town? Such a device would save from two to three operators and greatly speed up the work."

But "saying and doing are two different things" and it took Harmon Elliott longer to invent a mechanism to carry out this idea than was ever spent on any other Elliott invention.

He conceived the idea in 1923 but did not perfect it until 1940, after 17 long years of persistence, with never less than one man working on the problem and at least eight experimental machines finished and found unsatisfactory and discarded.

Harmon Elliott finally perfected a propeller feed machine that delivers the addressed publications to the *bottom* of the pile of addressed publications in the exit hopper.



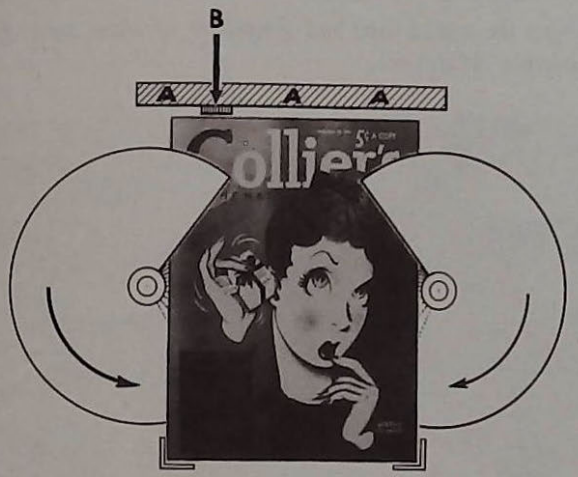
EDGE VIEW

A—After being addressed, magazines enter propeller mechanism here edgewise while propellers are constantly revolving.

B—Left propeller.

C—Right propeller.

D—Propellers quickly propel each magazine up to this position so the pile of addressed magazines continuously builds up from the bottom.



BIRD'S-EYE VIEW

Publication feeds through two propellers until its front edge hits stop A.

(Solenoid controlled ink pad B moves out to ink edge of first publication for each town.)

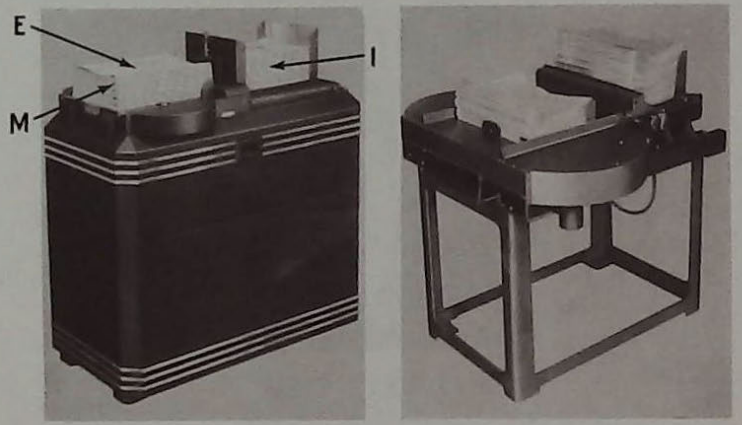
This view shows publication propelling up and out to a position on top of flat propeller surfaces.

This Elliott invention does away with reading addresses, and also does away with the manual "shucking" of the publications.

This new Elliott machine is much simpler and faster and sells *for less than half the price of the old-fashioned publication addressers.*

The Traffic Manager of one of the largest publishers in the United States recently saw this machine and said: "This is the greatest step forward I have seen since I entered the publishing business 27 years ago."

Notice the compactness and simplicity of these new Elliott Publication Addressers.



Addressing Magazines

Addressing Newspapers

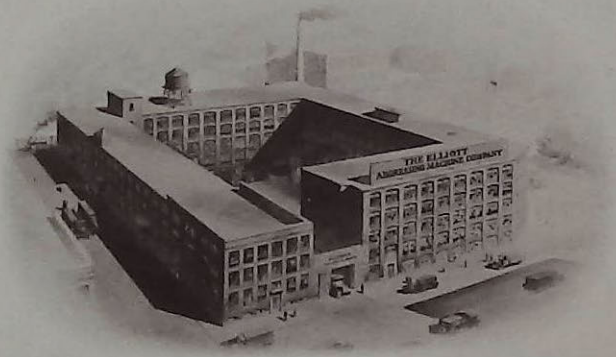
One operator continuously stacks publications on pile I.

Another operator continuously removes stacks of the addressed publications *from the top* of pile E.

M shows marks on the edge of first publication for each town, which marks tell the operator just how to pick off in one stack all the publications addressed to the same town.

These new Elliott machines can print addresses direct from Elliott Address Cards onto publications; or, if desired, subscribers' addresses can first be printed on rolls of paper and these new Elliott machines will chop off and glue the individual addresses from these rolls onto the publications.

We keep a large corps (not corpse) of trained inventors constantly at work making improvements and getting out new styles. We don't intend to be behind (at least not more than two or three years).



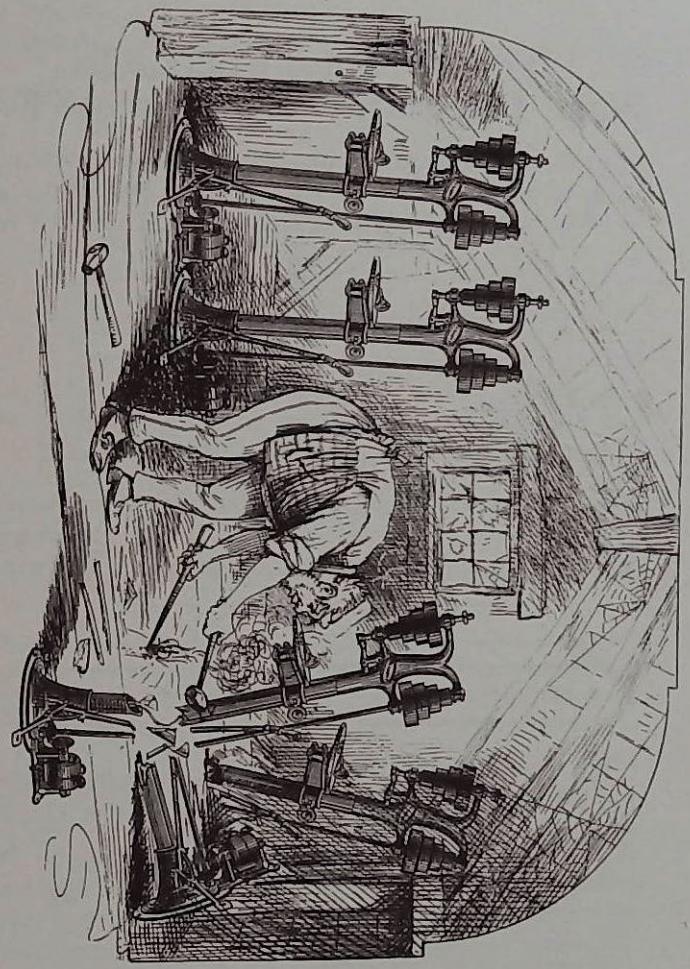
FOR fear some reader may get a wrong impression of the Elliott factory from the frontispiece and the picture on the front cover of this book, we show here an "honest to goodness" true picture of the Elliott factory at Cambridge, Massachusetts.

Although this factory turns out each year hundreds of millions of Elliott address cards and thousands of Elliott addressing machines (selling from $17.50 to $6,500.00 each) it has one huge room in which many mechanics are at all times experimenting with new machines made according to new ideas of Harmon Elliott.

Although this experimental room is (according to the Elliott Auditor) a $120,000.00 annual "drag" on Elliott profits, Harmon Elliott says:

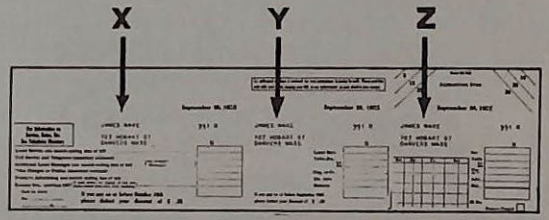
"Father was right when he said it was more fun to put salt on the tail of ideas than to make a profit."

All work built at this establishment is subjected to the most severe tests, and any part found defective is promptly thrown out.

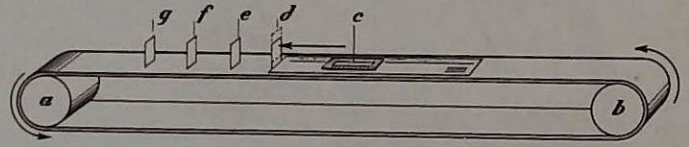


For Pre-printed Utility Bills Elliott Discards the "Skid & Bump" Feed

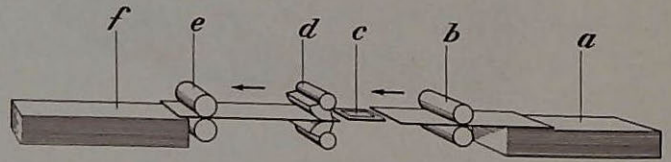
ALL utility companies that use pre-printed bills want to place the consumer's address several times side by side on the bill and stubs, as shown at X, Y & Z.



For this purpose all pre-printed bill addressing machines (except Elliott) use this "skid & bump" mechanism which was invented in 1912 by a man named Belknap.



But Harmon Elliott's new machine for this purpose (shown below) uses *positive* feed rolls so that the bills cannot fail to feed properly.



A — Pile of unaddressed bills.

B — Rollers that positively feed bill and position it to receive address at position (x).

C — Addressing mechanism that prints address while bills are stationary after each intermittent feed by (d).

D — After the address is printed at (x), the feed rolls (d) move bill along to receive the address at (y) and the next revolution of feed rolls (d) moves bill along to receive address at (z). The next revolution of feed rolls (d) moves bill until the constantly revolving rollers (e) can grip it and eject it from the machine, while simultaneously the feed rollers (b) are positioning the next bill to receive its address at position (x).

Note that this Elliott mechanism avoids slippage because it does not depend on friction to feed the bills, and it avoids jamming of the bills because the positioning of the bill is not accomplished by having the front edge of the bill hit against stops (like d, e, f and g in the "skid & bump" mechanism).

Harmon Elliott tells of one business man who decided to buy the "skid & bump" mechanism because "it is at least twice as big and has about three times as many parts and only costs 50% more than the Elliott machine."

The Elliott salesman asked Harmon Elliott what to say to this customer and Elliott replied:

"Tell him about the man who complained because a Boston dentist charged him $5.00 for pulling his tooth.

"He complained that the Boston dentist had pulled his tooth in about one second, and he thought $5.00 was an overcharge because a few years before a New Hampshire dentist had dragged him all over his office for about ten minutes to pull one tooth and had only charged him $7.50.

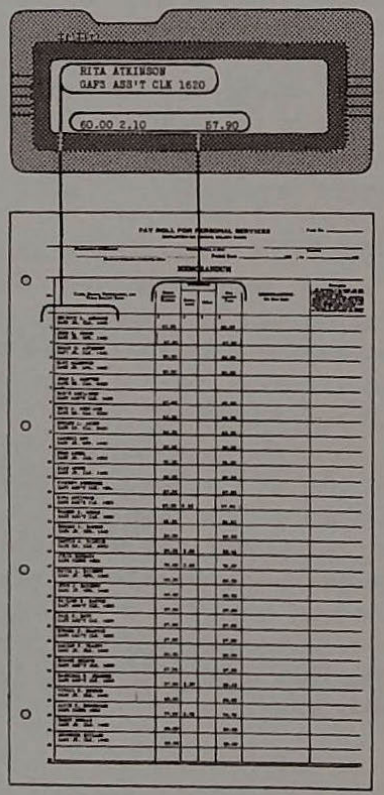
"He said the New Hampshire dentist had given him a lot more for his money."

For Double Column Sheet Addressing Elliott Discards the "Zig-Zag" Feed

ELLIOTT has made many special addressing machines for the United States Government.

In fact, most Government departments make a practice of submitting their addressing problems to Elliott of Cambridge. Here is an interesting example—

Uncle Sam asked Elliott to build a machine that would



imprint the top lines of each address card in the left column of the sheet and imprint the bottom line of each address card in the right hand column of the sheet.

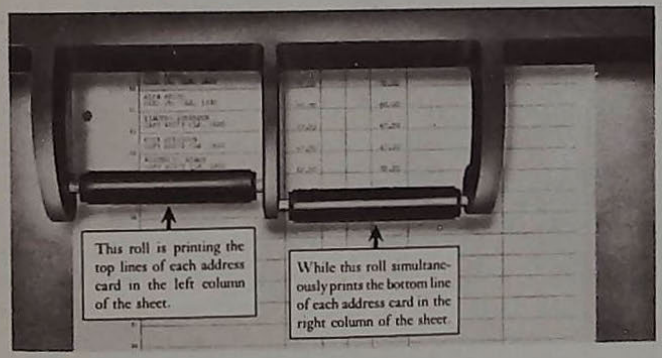
To do this Harmon Elliott invented an addressing machine with only one addressing roll through which this government pay sheet zig-zagged.

An automatic mask covered the bottom line of the address card while the top lines were being printed in the *left-hand* column of the sheet.

Then the mask automatically moved from the bottom to the top of the address card, while the sheet automatically moved to the left so that the bottom line of the address card was printed in the *right-hand* column of the sheet by the next impression.

Although it did the work and satisfied the Government, Harmon Elliott considered this zig-zag addressing machine to be a slow, noisy mechanical "abortion," because it took 60 revolutions of the addressing machine to imprint the 30 lines of each government pay sheet and the masks injured the address cards.

His dissatisfaction with this zig-zag idea caused him to invent this Elliott addressing machine with *two* address-



ing rolls which addressed two adjacent address cards *simultaneously*.

With this double address roll addressing machine the right-hand roll prints only the lower line of each address card in the right-hand column of the sheet, while the left-hand roll *simultaneously* prints only the top lines of the preceding address cards in the left-hand column of the sheet.

After each double impression, the sheet moves up one horizontal line, while the address cards are pushed one position to the left.

No mask is used and the sheet is fed straight instead of zig-zag.

The speed is doubled and the noise of the zig-zag mechanism is eliminated.

Because of Elliott patents all competing addressing machines do double-column addressing by Elliott's obsolete zig-zag process.

We relate these facts to explain why Elliott salesmen have learned by actual experience to believe that when better addressing machines are built Elliott will build them.

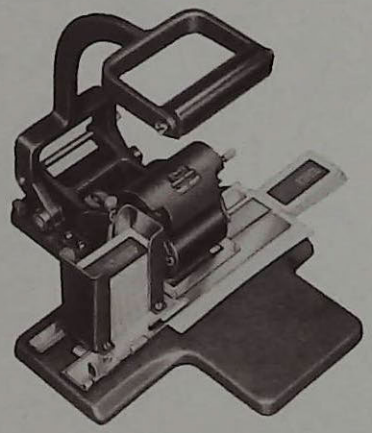
Elliott Invents An Advertising Scheme

ELLIOTT products have never been heavily advertised. In fact Elliott sales have never exceeded $3,000,000 per year.

But in 1940 Harmon Elliott announced that he had a scheme which would do in the addressing machine industry what Henry Ford had done in the automobile industry.

This scheme was to make the Elliott product "known", by offering the world this little addressing machine for $17.50, (which is about one-fifth the price of any comparable addressing machine in the world).

But it seems that in addition to introducing mechanical addressing to the "masses", this little machine is going to change the addressing habits of "big business."



Because America's largest businesses are already buying thousands of these little machines—"one for every branch and one for every dealer."

So they can "move their mailing lists from their head offices to their branch offices, where these lists will be more accurately compiled and more frequently corrected."

Scene on the coast of South Africa. Natives gathering and loading leaves of the plant (*ttoille*), to be used in the manufacture of *Elliott's Rubber Bicycle Tires.*

For Fun And Not For Money

WHEN the bicycling boom collapsed in 1899, Sterling Elliott's publication business collapsed with it and he lost his entire fortune plus about $50,000.00 that he could not pay.

His friends and even two of his largest creditors advised him to go through bankruptcy.

But Sterling Elliott refused because he said he could not be happy if anyone could say that they had lost money because they had had faith in him.

Twelve years later in 1911 Sterling Elliott made the final payment on this $50,000.00 debt.

Some years ago Harmon Elliott put one-third of all his Elliott Preferred Stock into an irrevocable trust fund for the hundreds of Elliott employees who have spent from 10 years to 20, 30, 40 and even 50 years in the Elliott service.

Harmon Elliott has had the terms of trust of his Employees' Trust Fund mimeographed and is proud of the letters he has received from other employers who have asked for copies of it because they "contemplated taking similar action".

He believes that his Employees' Trust Fund plan will restore the happiness and good-will that existed in American factories in the days of long ago.

Elliott Inventions

THIS book has told you of only ten Elliott inventions, but the United States Patent Office at Washington, D. C., will (at a charge of 10c per copy) send you a copy of any other Elliott patent in which you may be interested.

When ordering it is simply necessary to give the number of the patent desired, which you can get from the following list of all Elliott patents.

Complete List of Patents Issued to Sterling Elliott

Elliott Number	*Patent Office Number*	*Date Granted*	*Title*
1...	148,681	Mar. 17, 1874	Spring Equalizer for Vehicles
2...	164,437	June 15, 1875	Treadle
3...	189,313	Apr. 10, 1877	Process for amalgamating Ores
4...	201,426	Mar. 19, 1878	Egg Carrier
5...	207,597	Sept. 3, 1878	Cutting gage
6...	237,966	Feb. 22, 1881	Stitching & tying pamphlets
7...	240,584	Apr. 26, 1881	Wood turning machine
8...	246,103	Aug. 23, 1881	Sewing Machine
9...	250,718	Dec. 13, 1881	Sewing Machine
10...	263,031	Aug. 22, 1882	Pamphlet Stitching Machine
11...	324,759	Aug. 18, 1885	Drilling Machine
12...	379,270	Mar. 13, 1888	Tricycle
13...	418,281	Dec. 31, 1889	Transmitting different speeds
14...	428,383	May 20, 1890	Brake for velocipede
15...	440,701	Nov. 18, 1890	Wheel Tire and Rim
16...	440,702	Nov. 18, 1890	Wheel Tire and Rim

Elliott Number	*Patent Office Number*	*Date Granted*	*Title*
17...	442,174	Dec. 9, 1890	Tandem velocipede
18...	442,663	Dec. 16, 1890	Velocipede
19...	442,730	Dec. 16, 1890	Wheel Tire
20...	444,485	Jan. 13, 1891	Wheel
21...	446,670	Feb. 17, 1891	Tricycle
22...	446,671	Feb. 17, 1891	Tricycle
23...	446,672	Feb. 17, 1891	Velocipede
24...	447,813	Mar. 10, 1891	Drive-chain
25...	447,814	Mar. 10, 1891	Oil-links for Drive chains
26...	456,946	Aug. 4, 1891	Book Stitching Machine
27...	464,014	Dec. 1, 1891	Tire for wheels
28...	483,836	Oct. 4, 1892	Ball bearing for axles
29...	487,874	Dec. 13, 1892	Pneumatic Tire
30...	489,295	Jan. 3, 1893	Pneumatic Tire
31...	491,475	Feb. 7, 1893	Support for velocipedes
32...	491,750	Feb. 14, 1893	Covering for drive-chains
33...	491,938	Feb. 14, 1893	Ball-bearing
34...	494,113	Mar. 21, 1893	Sulky
35...	498,709	May 30, 1893	Sulky
36...	507,068	Oct. 17, 1893	Wheel support for vehicles
37...	509,429	Nov. 28, 1893	Bicycle
38...	518,138	Apr. 10, 1894	Ball bearing for wheels
39...	518,139	Apr. 10, 1894	Ball bearing
40...	521,460	June 19, 1894	Sulky
41...	521,878	June 26, 1894	Sulky
42...	527,781	Oct. 23, 1894	Flexible tire and rim
43...	527,782	Oct. 23, 1894	Flexible Tire and wheel
44...	529,112	Nov. 13, 1894	Wooden Rim
45...	539,578	May 21, 1895	Sulky
46...	587,945	Aug. 10, 1897	Holder for Bicycle
47...	625,657	May 23, 1899	Bicycle Holder
48...	676,032	June 11, 1901	Holder for Stencils
49...	676,033	June 11, 1901	Steam Boiler
50...	676,034	June 11, 1901	Sorting plates for stencils
51...	676,535	June 18, 1901	Device for Coupling bicycles
52...	696,021	Mar. 25, 1902	Machine for folding and wrapping
53...	703,563	July 1, 1902	Guard for Third Rail

Elliott Number	Patent Office Number	Date Granted	Title
54...	707,961	Aug. 26, 1902	Sorting and Addressing Machine
55...	708,628	Sept. 9, 1902	Stencil frame
56...	712,124	Oct. 28, 1902	Apparatus for Cutting stencils
57...	712,125	Oct. 28, 1902	Stencil Cutting Machine
58...	714,103	Nov. 18, 1902	Burner
59...	714,789	Dec. 2, 1902	Addressing Machine
60...	714,790	Dec. 2, 1902	Addressing Machine
61...	749,724	Jan. 19, 1904	Turn Table
62...	755,286	Mar. 22, 1904	Feed Water Heater
63...	757,728	Apr. 19, 1904	Apparatus for folding & wrapping
64...	842,948	Feb. 5, 1907	Device for making Address Cards
65...	856,136	June 4, 1907	Device for making Address Cards
66...	868,977	Oct. 22, 1907	Device for making Address Cards
67...	885,842	Apr. 28, 1908	Turn table
68...	Re.12836	July 28, 1909	Device for making Address Cards
69...	927,842	July 13, 1909	Stencil Cutting Machine
70...	927,843	July 13, 1909	Making alloy of zinc with copper
71...	935,196	Sept. 28, 1909	Addressing machine
72...	948,373	Feb. 8, 1910	Tubular Steam Boiler
73...	993,665	May 30, 1911	Liquid Hydrocarbon Burner
74...	993,666	May 30, 1911	Fuel Control device
75...	996,228	June 27, 1911	Stencil cutting device
76...	996,229	June 27, 1911	Stencil Cutting Device
77...	1,025,459	May 7, 1912	Addressing Machine
78...	1,029,112	June 11, 1912	Addressing Machine
79...	1,034,600	Aug. 6, 1912	Stencil strip
80...	1,036,201	Aug. 20, 1912	Ink-roll for printing presses
81...	1,036,202	Aug. 20, 1912	Inking mechanism
82...	1,047,011	Dec. 10, 1912	Friction clutch
83...	1,047,012	Dec. 10, 1912	Oil Cup
84...	1,073,481	Sept. 16, 1913	Drinking cup
85...	1,121,080	Dec. 15, 1914	Machine for making stencils
86...	1,140,889	May 25, 1915	Machine for making stencils
87...	1,163,744	Dec. 14, 1915	Stencil Cutting Machine
88...	1,180,385	Apr. 25, 1916	Addressing Machine
89...	1,197,925	Sept. 12, 1916	Apparatus for coating paper
90...	1,210,440	Jan. 2, 1917	Addressing Machine

Elliott Number	Patent Office Number	Date Granted	Title
91...	1,210,441	Jan. 2, 1917	Apparatus for moistening stencils
92...	1,210,442	Jan. 2, 1917	Gluing machine for stencil frames
93...	1,210,443	Jan. 2, 1917	Stencil Feeding mechanism
94...	1,220,734	Mar. 27, 1917	Addressing Machine
95...	1,230,068	June 12, 1917	Waterproofing sized sheets
96...	1,232,666	July 10, 1917	Machine for making address-plates
97...	1,324,587	Dec. 9, 1919	Sliding-door-operating device
98...	1,326,130	Dec. 23, 1919	Electrically operated door
99...	1,371,231	Mar. 15, 1921	Centrifugal oil burners
100...	1,378,771	May 17, 1921	Machine for impressing characters
101...	1,461,867	July 17, 1923	Stencil making
102...	1,480,200	Jan. 8, 1924	Stencil
103...	1,481,834	Jan. 29, 1924	Art of stencil making
104...	1,550,893	Aug. 25, 1925	Printing Machine

Complete List of Patents Issued to Harmon Elliott

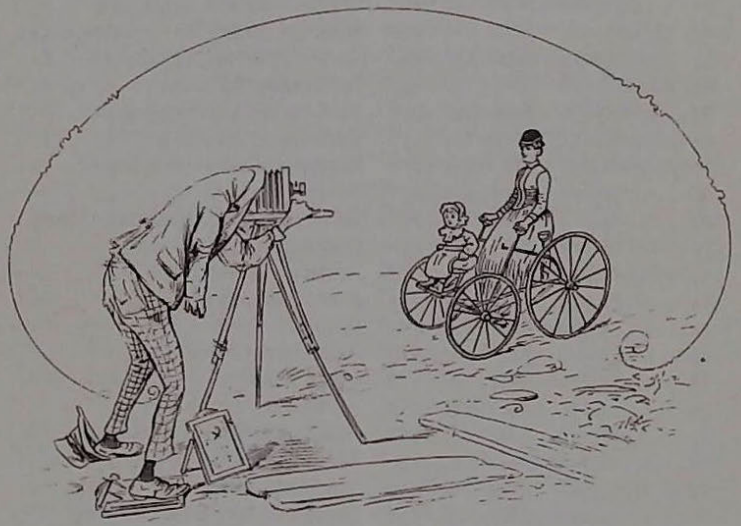
Elliott Number	Patent Office Number	Date Granted	Title
1...	1,000,501	Aug. 15, 1911	Address Card Index Notch
2...	1,036,200	Aug. 20, 1912	Paste Ink Reservoir
3...	1,064,303	June 10, 1913	Follower Clip for Filing Tray
4...	1,068,578	July 29, 1913	Typewriteable Address Card
5...	1,136,591	Apr. 20, 1915	Carbon Backing reversed
6...	1,563,268	Nov. 24, 1925	Rotary Skipper & Repeater
7...	1,581,726	Apr. 20, 1926	Suction stencil feed Machine
8...	1,588,099	June 8, 1926	Visual Selector Rotary Machine
9...	1,593,210	July 20, 1926	Upbended visible index cards
10...	1,614,547	Jan. 18, 1927	Liquid Ink Reservoir
11...	1,662,964	Mar. 20, 1928	Stencil Loading Tray
12...	1,694,619	Dec. 11, 1928	Clothes Wringer Addressers
13...	1,728,200	Sept. 17, 1929	Stencil Hopper
14...	1,801,729	Apr. 21, 1931	Boat Mooring Buoy
15...	1,807,309	May 26, 1931	Address Card Ejecting Machine
16...	1,833,936	Dec. 1, 1931	Zig-zag Addresser

Elliott Number	Patent Office Number	Date Granted	Title
17	1,833,937	Dec. 1, 1931	Printing 3 lines as one line
18	1,833,938	Dec. 1, 1931	Sheet Ejector device
19	1,867,399	July 12, 1932	Frame Strip Conditioning
20	1,872,130	Aug. 16, 1932	Printing Stencils
21	1,874,476	Aug. 30, 1932	Glue Groove in Stencil Frame
22	1,880,931	Oct. 4, 1932	Rotary Addresser
23	1,880,932	Oct. 4, 1932	Electrotype Roll for Bill Printer
24	1,883,643	Oct. 18, 1932	Disc Selector Attachment
25	1,909,910	May 16, 1933	Post Card Printer
26	1,909,911	May 16, 1933	Hand Addresser Sheet Feed
27	1,909,912	May 16, 1933	Printing Permit with Address
28	1,909,913	May 16, 1933	Removable Carbon Backing
29	1,916,564	July 4, 1933	Electric Post Card Printer
30	1,921,511	Aug. 8, 1933	Doublehead Alternate Printing
31	1,921,512	Aug. 8, 1933	Progressograph Machine
32	1,922,533	Aug. 15, 1933	Post Card Printer Inker
33	1,928,311	Sept. 26, 1933	Automatic Stencil Moistener
34	1,937,750	Dec. 5, 1933	Notched P.C.P. Message Stencil
35	1,937,751	Dec. 5, 1933	Legible Stencil
36	1,949,535	Mar. 6, 1934	Non-tipping Tray
37	1,956,672	May 1, 1934	Stencil-Holding Trays
38	1,958,535	May 15, 1934	Buoys for Mooring Boats
39	1,966,664	July 17, 1934	Printing Devices
40	1,976,928	Oct. 16, 1934	Stencil Printing Apparatus
41	1,982,504	Nov. 27, 1934	Stencil Filing Cabinet
42	1,985,244	Dec. 25, 1934	Bill Printing & Addressing Mach.
43	1,985,245	Dec. 25, 1934	Printing Machines and Methods
44	1,985,246	Dec. 25, 1934	Printing & Addressing Machine
45	1,985,247	Dec. 25, 1934	Bill Printing & Addressing Mach.
46	1,986,142	Jan. 1, 1935	Bill Printing & Addressing Mach.
47	1,986,800	Jan. 8, 1935	Card & Envelope Feeding Apparatus
48	1,988,113	Jan. 15, 1935	Rotary Printing Apparatus
49	1,990,534	Feb. 12, 1935	Sheet Feeding Printing Apparatus
50	1,990,535	Feb. 12, 1935	Stencil Sheets
51	1,996,954	Apr. 9, 1935	Addressing Machine
52	1,996,955	Apr. 9, 1935	Floating Wharf
53	2,013,089	Sept. 3, 1935	Stencil Printing Apparatus

Elliott Number	Patent Office Number	Date Granted	Title
54	2,015,552	Sept. 24, 1935	Wrapper Printing & Addressing
55	2,016,855	Oct. 8, 1935	Stencil Printing Apparatus
56	2,022,539	Nov. 26, 1935	Rotary Stencil Printing Apparatus
57	2,022,540	Nov. 26, 1935	Apparatus for stenciling
58	2,035,695	Mar. 31, 1936	Addressing and Listing Machine
59	2,042,516	June 2, 1936	Stencil Trays & Tray Holder
60	2,049,537	Aug. 4, 1936	Stencil Moistening Machine
61	2,053,070	Sept. 1, 1936	Rotary Printing Apparatus
62	2,053,071	Sept. 1, 1936	Selective Stencil Printing Apparatus
63	2,054,695	Sept. 15, 1936	Stencil Printing Apparatus
64	2,088,468	July 27, 1937	Addressing Machine
65	2,088,469	July 27, 1937	Addressing Machine Inker
66	2,091,435	Aug. 21, 1937	Perforating Machine
67	2,106,675	Jan. 25, 1938	Repeat Printing Attachment
68	2,131,503	Sept. 27, 1938	Stencil
69	2,134,814	Nov. 1, 1938	Addressing & Tabulating Mach.
70	2,134,815	Nov. 1, 1938	Printing Machine
71	2,144,650	Jan. 24, 1939	Addressing Machine
72	2,145,299	Jan. 31, 1939	Automatic Feeding Device
73	2,145,300	Jan. 31, 1939	Stencil
74	2,145,301	Jan. 31, 1939	Addressing Machine
75	2,152,178	Mar. 28, 1939	Label Printer
76	2,152,179	Mar. 28, 1939	Addressing Machine
77	2,152,180	Mar. 28, 1939	Automatic Stencil Moistener
78	2,158,749	May 16, 1939	Thin Printing Device
79	2,165,748	July 11, 1939	Machine for Card Feeding
80	2,185,014	Dec. 26, 1939	Machine for Card Feeding
81	2,189,104	Feb. 6, 1940	Printing Plate for Add. Machines
82	2,193,064	Mar. 12, 1940	Printing Apparatus
83	2,198,004	Apr. 23, 1940	Tray Follower
84	2,198,992	Apr. 30, 1940	Record Stencil
85	2,206,743	July 2, 1940	Machines for Multisection Bills
86	2,210,712	Aug. 6, 1940	Card Stencil
87	2,210,713	Aug. 6, 1940	Double Panel Card Stencil
88	2,213,341	Sept. 3, 1940	Addressing Machine
89	2,213,490	Sept. 3, 1940	Addressing and Statistical Printing
90	2,230,451	Feb. 4, 1941	Statement Addressing Machine

Elliott Number	*Patent Office Number*	*Date Granted*	*Title*
91	2,230,452	Feb. 4, 1941	Sealing and Addressing Machine
92	2,239,353	Apr. 22, 1941	Flexible Metal Frame
93	2,239,354	Apr. 22, 1941	Multiple Panel Stencil
94	2,239,355	Apr. 22, 1941	Ledger Posting Addresser

In addition to the foregoing issued patents Harmon Elliott has 17 Patents Pending.



We can furnish photographs, when desired, of any thing we build.

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available to business executives upon request

1. Booklet describing the Elliott Cardvertiser which *prints* and *addresses* cards.
2. Book on the Elliott System for Laundries.
3. Book on the Elliott System for Banks and Trust Companies.
4. Book on the Elliott System for Publishers.
5. Book on the Elliott System for Public Utility Companies.
6. Book on the Elliott System for Coal Dealers.
7. Book on the Elliott System for Payroll Work.
8. Book on the Elliott System for Insurance Companies.
9. Book on the Elliott System for Tax Work.
10. General Catalog.
11. Book on direct-mail advertising for retail stores.
12. Bulletin on Elliott Addressing-Installment Coupon Machine.
13. Bulletin on Elliott Addressing and Post-Card Printing Machines for R. E. M. C. Organizations.
14. Bulletin on Selective Sales and Advertising Systems for Public Utility Companies.
15. Bulletin on a Post-Card Billing System for a Water Company and Two-Color Bill Printing for an Electric Power Company.

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