STHE TELEORAPHERS CATION 60A

THE MORSE SYSTEM IN USE SINCE 1844, LIKELY TO BE SUP-PLANTED BY THE BARCIAY PERFORATING MACHINES

"W ILL the Barclay printing ma-chine revolutioning the tele-graph as it was established in 1844 by the Morse system?" is the all-absorbing question in the minds of thousands of telegraphers in the United States and Canada

To the younger members of the profession, whose memory of the past is but a dream of boyhood, and whose thoughts of the future do not go beoming frivolity, this far-reaching question is of little concern. But it is to the veterans who have grown gray by the service, men whose existence de pends alone upon the skill in manipulating a telegraph key and their ability to decipher the mysterious dots and that the encroachment of mechanical genius upon their cho feasion, is causing no end of worry and anxiety.

Since the 24th day of May, 1844, when Professor Samuel S. T. Morse sent those four immortal words, "What God hath wrought," over an electric-charged wire from the rooms of the United States Superme Court rooms in Washington, D. C., to Baltimore, Md. the supremacy of the Morse system over any mechanical device has been undisputed. Every effort of the so-called "wizards of electricity," and there have been many at them in the past 80-odd years, has been looked upon with disdain by telegraphers, and so accustomed have they become to the repeated failures to replace the Morse system with mechanical telegraphy that they confidentity believed that it would never be accomplished. from the rooms of the United States Su-

be accomplished.

Ask any telegrapher today for his opinion of the various systems of transmitting messages, and he will tell you that all of the new-fangled inventions are impracticable; that the telegraph as operated at the present time will never be improved upon. His opinion is not institute that the can be pardoned for his optimistic view.

Music to His Ears.

many years.

When the mechanical instrument encomes upon their profession, then the profession then the profession then the large promotes and over suffer from the triefly profession, then the profession then the profession than the profession then the large promotes and over suffer from the triefly profession then the profession than the p



The click of the instrument is mu-sic to his cars. He loves its sound as the enthusiastic musician loves the When the mechanical instrument en-

was eager to view for the first time the wonderful machine that was eventually to mean so much to them. The matter had been made the topic of conversation for several days, and all the while every eye was turned in the direction of the Barclay printing machine, eager to see the beginning of what, to some of them, at least, spelled their doom. After several days the trying ordeal was practically over for the time being. Skilled electricians had put the machines in place and all was in readiness for the first attempt. Long before the arrival of the machines a picked set of young men and women before the arrival of the machines a picked set of young men and women had been selected from among the many employes of the Western Union office. With all the available material they had been coached in the manipu-lation of the machines. Pictures had been shown them and they were in-structed to familiarize themselves with structed to familiarize themselves with every little detail. Consequently, when the machines were in place there was little doubt in the minds of the telegraph officials that they would be successful. Finally, one morning, the psychological moment arrived. The operators who had been assigned to operate the machines, already familiar with many of the details, took their places. The current was turned on, the machines began to hum and the tension of every man and woman in the large room was at once at its height.

RECEIVING

MACHIONES

Transmission Is Automatic.

No operator is needed at the receiving typewriter. A girl only is needed, whose duty it is to keep the machines filled with paper and carry away the messages as fast as they are written. One girl can take care of a dozen or more receiving typewriters. The carriage moves back and forth and the spacer turns the roll automatically. The bars rise up and strike the roll, the carriage moves along of its own accord, and at the end of the line the carriage gives a click, the or its own accord, and at the end of the line the carriage gives a click, the spacer turns the roll two notches, and the carriage slides back for another line. All the operator has to do is to pull the paper out when it gets full and slip in a frash one.

Many of those telegraphers who stood bestie the Barclay printing machine watching its workings for a time realized that the time of the Morse system would soon be over. True, it may be several years before a complete revolution is effected, but it is as sure to come as the cycle of time moves forward.

The machine is simple enough in operation, the operator, who may be some boy or girl who has never been inside of a telegraph office, touching the keys of the typewriter just as one writing on an ordinary office machine.

The instrument has the standard keyboard. The touch of the key causes a certain combination of holes to be punched in a strip of paper, as sheets are punched for piano players. Each combination of holes represents a letter. When the message is written, the punched strip is run through a sender. This has a system of plungers that fit into the holes, and when a combination of plungers have been operated it sends a current through the wire that operates the corresponding key upon the receiving the machine consists of four perforating machine sand two transmilters and receivers each. As an indication that passes to the distant machine.

Amazing Speed.

The machines are much faster than the fastest operator, and are absolutely accurate. In cases of a mustake, both the sending and receiving machine has to receive the exact letter sent or else it will not work. If there is something the matter with the current in the receiving machine so that the letter sent is not recorded it gets stuck; the signal is sent back to the sending and receiving machine has to receive the exact letter sent or else it will not work. If there is something the matter with the current in the receiving machine so that the letter sent is not recorded it gets stuck; the signal is sent back to the sending and receiving machine has to receive the exact letter sent or else it will not work. If there is something the matter with the current in the receiving machine stops.

The instrument has the standard key-like the sending and recei

chine has speed as well as reliability, an instance is cited when a test was made some time ago. On a circuit be-tween Oniaha and Kansas City 85 mea-sages were handled in 35 minutes with-

transmit the same number of telegrams. It is especially adapted to press work, although the use of the machine has been confined to message work so far. It has been known to transmit at the rate of 120 words a minute, which is nearly three times as fast as the mest expert operator can send by hand. The inventor of the machine, which bears his name, is J. C. Barclay, vice-president and general electrician of the Western Union Telegraph Company. Mr. Barclay invented many different kinds of machines used in telegraphy, but nose of them compare in any sense with the of machines used in telegraphy, but nose of them compare in any sense with the Barclay printing machine. They are costly instruments, the receiver alone costing \$1000. One set of the machines will take the place of several operators, and whils they are quite an expense to operate, they do away with the high-salaried operator and save considerable wire mileerator and save considerable wire mile-

age.

Up to the present time these machines have been installed in all of the larger offices as far west as Omaha. They will soon be in operation in all of the large properties on the continuous con Western cities, particularly those on the

Giving Cuyler "The Squeeze"=Prof. Shorty McCabe Tells How He Disposed of a "Pick-Up"

days, when the asphalt gets to softening and the excursion trains are bein sent out double headed, and it's then Broadway comes nearest to givin' an imitation of Main street in Skowhegan. an.

I was just thinkin' about chasin' my-self out to Primrose Park and treatin' the mosquitoes, when up to the curb rolls a big gasoline parior car with the windows all open and one lonesome gent sittin' up stiff and straight in the middle seat. Even before he opens the gate I feels the cool air rushin' out, and if I'd had my eyes shut I could have guessed it was either Vice-President Fair-banks or Cuyler Hartshorn.

banks or Cuyler Hartshorn.

Which was it? Ah, say, you don't think I'm handlin' the North Pole candidate, do you? It was Cuyler, of course. Maybe he sin't such a big block off the berg as the Indiana gent, but in his way cuyler is a good deal of a human frappe. But I don't mind a little thing like that, specially this kind of weather. When he drifts into the studio, there ain't any need runnin' the slectric fans.

He's been one of my reg'lars for quite sometime now, and we've got so well

sometime now, and we've got so well acquainted that he can almost tell me from Swifty Joe. That's a good deal for a man whose father-in-law is the main shaft of a trust. Ever see one of that kind? Two or three years ago Cuyler was livin' on the cheap at a college club, and his whole absets was one trunk. was livin on the cheap at a college club, and his whole assets was one trunk, three shares of Standard Oil common, and the fam'ly coat of arms done in colored ink. Now he carries a latch key to a double-breasted house on Riverside Drive, sets in at directors' meetin's, and makes a noise like a balloon when papath-law don't happen to be around the office. Say, I can just see him chillin' the gizzards of them ten-dollar cierks. Never had a glimpse of Cuyler, ch' lie's one of those boys with a nose—not the Pajostine brand, but a reg'lar straight front; torpede bow, fog splitter—a nose

front; torpedo bow, fog splitter-a noso what am. Holds it well up in the air. Cuyler does, and looks out past it at you like he was tryin' to guess what excuse you had for livin'. That's what comes of not bein' able to forget that you're third vice-president of a trust by mar riage and that your great-grandfather had his name cut on a monument. So I mear loses my halance when Cuyler gives me the signal to butt into the limousine. says I, lookin' around to see if he didn't mean some one else. He nods

expect you'd like to take a little run with me down to Coney Island and back, wouldn't you?" says he

If it had been John D, himself I wouldn't have gasped harder, or grabbed it quicker. "You couldn't have picked a more willin' party," says I, jumpin' in and sisimmin' the door. "Coney for mine! (1998ap.")

Cuyler pushes a little button, and Jules ont porch gives her the first

"Gee!" says I, running my eye over

the after trimmin's and workin' my shoulder into the leather paddin', "this is populence, all right! Guess you had to hip a few thou off your bank roll then you picked this wagon, eh. Mr.

less like. "Belongs to Mrs. Hartshorn's father, you know."

the pancake flour agents calls a practical

demonstration. First off, this little trip of his, that has First off, this little trip of his, that has all the tags of a reckless blowout, was just a swell way of don' the iron steambeats out of half a dollar. Father-in-law bein' in Europe, the machine was made free to son Cuyler. Seems that Mrs. Cuyler was away with the old folks too, and that's a whole lot cheaper than payin' the passage money yourself.

Maybe Cuyler wan't achin' to give up all these points; but I was tryin' to be

all these points; but I was tryin sociable, so they come out. Anyway, he didn't talk none about countin' up

much he was savin'. Fact is, he seemed to enjoy it.

"And by crossing Brooklyn bridge instead of taking the Ierry," says he, "I can make the entire trip without spending a cent."

"You're a wonder," says I.

But say, I didn't half appreciate him. I was figurin' on seein' him let loose of some coin after we got to the Island. Ever knew anyone to get clear of Coney without givin' up a few quarters? Well, I'd never seen it done until Cuyler shows me the way. Does he stow the car in a garage and get out where the barkers and pullers-in can have a fair show? Not him! He don't even unboit the door. We just rolls up and down Surf avenue a couple of times, strewin' pangs of envy like a sprinklin' cart sheds water, and then we heads for the city again, without so much as crackin' open a bag of peanuts.

"Does tan one of them Manhattan

Beach dinners?" says I, not hintin', of

course.
"No," says he: "I always carry a luncheon hamper with me."
Think of a man that has codles of

Think of a man that has codies of it within reach cartin' cold sandwiches over a 15-mile course just lined with cafes and road houses! I began wonderin' if I shouldn't offer to pay for half of the gasoline.

We'd gone a couple of miles up the boulevard from the beach when somethin' happens to the spark, and Frenchy has to haul up to one side of the road and sprawl underneath with the monkey wrench. Cuyler and I had climbed out to stretch our legs in the parkway, when we most steps on the queerest-lookin'

wench. Cuyler and I had climbed out to stretch our legs in the parkway, when we most steps on the queerest-lookin' freak I ever see at large.

He was squattin' on the grass with his back up against a tree, roilin' a cigaretie. And say, I've seen some fancy regalia worn in place of clothes, but I never got real close to such a dippy contume as that! Mostly it was unbleached cotton, with a couple of careless folds makin' the high water pants, and some more of it draped over the shoulders and tucked into a red and green sash. He has a bonnet made of the same stuff, a dinky little vest with silver buttons and gold braid on it, and a pair of shingles fied on his feet for shoes. Sandals? Maybe. But, barrin' the bonnet, it was a hot wave get up for fair.

"Is it a new deal in bathin' suits, or what?" says I to Cuyler.

"An Oriental costume of some sort,"

"An Oriental costume of some sort,"

says he.

'Oh, one of them rug peddlers, eh?'
says I. He must have strayed from the bland. Wait till I try him with the Elk's

Cuyler. He's always as serious as if he was buryin' his grandmother, and as stiff as if he was a sine rain pipe.

was buryin' his grandmother, and as stiff as if he was a sinc rain pipe.

Course, I wa'n't lookin' for any answerin' move from the mummy. Then folks never seem real human to me. I've watched 'em squattin' cross-legged in show windows, and you couldn't tell whether they was alive or just wound up. But someway this fool play of mine seems to make a hit with this one. He jerks his clin up, and them his black eyes of his come open wide. So I does it again. I hadn't more'n started before he untangles himself and stands up. And say, when he straightens out his joints he's a good deal of a boy—6 foot 2 if he was an inch, and built as lean and stringy as old Fitz.

"Ay yah!" says he, gruntin' it out deep.

"Ay yah!" Ay yah!" Then he goes through motions a good deal life mine, only stickin' his fingers out straight instead of up.

stead of up. "Gee!" says I. "that's no great stunt.

How's this?" How's this?"

Well, I must have made good; for the next thing I knows he is bendin' himself double, spreadin' his arms out like he was goin' to dive, and uncorkin' the awiftest set of remarks I ever heard. It sounded smooth and kind of singsongy; but there wasn't a word I could get next

"Did you catch any of that?" I says to Cuyler. He has edged off to a safe distance. He has edged off to a safe distance in the and is watchin' the performance in that fish-eyed way of his. Never a grin, though He just shakes his head.
"Guess you'll have to slip on another record," says I to the stray. "Give it to us in English."

He looks mighty nursled at that: but

He looks mighty puzzled at that; but be makes out that he's wastin' breath by

He looks mighty puzzled at that; but he makes out that he's wastin' breath by taikin', so he falls back on motions. First he hits himself on the chest, next he points back towards Coney, then he leans forwards, runs his long neck out, bobe his head from side to side and soes, "Oosh! Cosh!"

"Why, sure!" says I. "That's as pinin as print, old leather face. You're foot coachman to one of them Streets of Cairo cameis. Yes, I've heard that 'Oosh! Oosh! call lot of times. What next?"

That's as far as he could go, though; so we stands there lookin' foolish at each other. And say, come to take a close view, there was somethin' to the cuss besides just height. He was considerable on the burnette, bein' a nice terra cotta from his feet up; but he was as far from the Rufus Hastus class as I am from bein' an Albino. He has a nose like an eagle, and a pair of eyes that lights up like a cat's does in the dark. Then the way he carries his head and shoulders! Why, standin' there in that circus outfit, with his bare legs, he looks as imposin' and satisfied as any floor walker you ever see; and anybody that can throw a from like that always floor walker you ever see; and anybody that can throw a front like that always gets me interested.

Just then Jules backs out from under

the machine and strolls up to see what

the machine and strois up to see what we've struck.

"Hey, Frenchy!" says L. "Here's a friend of mine that ain't had his voice naturalized, but has got thoughts he wants to unlead. Spose you try some of your pollyvoo lingo on him."

Would you believe it? Them two ignorant foreigners goes to chinnin' away.

arms, until you'd think they was workin' up for a rough and tumble.
"Ah, don't call him that again, Frenchy, says I. "What's all the de-

bate about, anyway?" "He says his name is Hassan el Boom.

"Sounds like it might be so," says I "Did he say anything else?"
He had. He'd been givin Frenchy a thumbnall sketch of his life. Seems that Hassan was a sure enough Ayrab that had been brought over by Luna Park people. Some way or other they'd hurt his feelin's and he'd up and chucked the job, just walkin' out without sayin' a word to nobody. All the wardrobe he had was what he

and that he will serve you forever,"
says Frenchy.
"Gwan!" says I. "You tell him from
me that he's a son of a gun and that
he'd better roll his hoop."
But say, all the impression Frenchy
could make on that lengthy Ayrab was
to set him to bowin' and scrapin' and
sayin' over and over that he'd picked
me for his bess. Cuyler seems to think
there's somethin' funny about that, and
he comes as near snickerin' as I ever
see him.
"Gee!" says I, "this is touchin' if



THE WAY THE AYRAB TAKES CUYLER'S MEASURE WAS A CAUTION.

opper pieces that looked like trunk checks, and he didn't have any more idea where he was goin' than a pup in an express crate.

in an express crate.

"Comfortable way to travel," says I.

"Tell him I wish him luck, Jules," and
I follows Cuyler into the machine.
Frenchy has delivered the message and was gettin' into his seat, ready to turn her loose, when Hassan rushes over and starts to pile in with us. Cuyler most has a fit at that, and waves him off with both hands. "Tell him to clear out, Jules!"

says L cheer up. Tell him I'll put his name on file and next time I need a camel driver I'll send for him." But that didn't do any good. But Hassan don't act like he was takin' orders from any one. He throws out a few offhand remarks in French, and gets a grip on the door handle. Jules turns to me, grinnin'. "He says you have spoken to him as people in his land speak to the beasts," says Frenchy. "He is sad that the son of a shelk should find him so un-"He says that where you go he goes,

"It is rather a good car," says he, careis like. "Belongs to Mrs. Harishorn's
ther, you know."

With that I puts my thumbs to my
might he e guessed that, for any of

ears and wiggles my fingers, just for a

"He says that where you go he goes,"
says Frenchy.

"He says that where you go he goes,"
says Frenchy.

"He coes, eh?" says L. "Well, you
to fyour pollyvoo lingo on him."

Would you believe it? Them two ignorant foreigners goes to chimin' away
norant foreigners goes to chimin' away
says Frenchy.

"He says that where you go he goes,"
says Frenchy.

"He says that where you go he goes,"
says Frenchy.

"He says that where you go he goes,"
says Frenchy.

"He does, eh?" says L. "Well, you
to find you believe it? Them two ignorant foreigners goes to chimin' away
norant foreigners goes to chimin' away
as slick as though they'd been brought
any sideshow."

"He says he can only drive camels," has on, his cash capital was a few says Jules.

"Camels!" says I. "Here, le' me talk

"Frenchy," says L "you tell him to

orthy."
"Now wouldn't that crust you!" says
to Cuyler. "I thought I was just

en quite a fancy to you."
"It's a great thing to have such

winnin' ways," says I. "But he is up against it, ain't he? What do you say to cartin' him up to town and tryin' to find some of his friends?"

I was lookin' for Cuyler to go up in the air at that proposition, but he don't. Havin' figured out that it won't cost him anything and that maybe

there's somethin' funny about that, and he comes as near snickerin' as I ever see him.

"Gee!" says I, "this is touchin' if true. Ask him what kind of work he can do."

"He says he can only drive camels,"

"Gee aboard, and we'll in "says I. "Get aboard, and "says I. "Get aboard, and "says I. "Get aboard, and "says II. "says II. "Get aboard, and "says II. "get aboard, and "says II. "says II. "get aboard, and "says II. "get aboard, and "says II. "says II. "get aboard, and "says II. "get aboard, and "says II. "

show you a way of gettin' over the ground that's got camel ridin' spiked to the track."

Maybe you think that Ayrab holds on with both hands and presses down hard with his feet when Jules begins to let her out. Not much. He squats in a corner seat, lookin' as calm as though he ways settin' on a rug in front of a tent. And him lately landed from a country where rapid transit means a ride on a hump-backed muley cow! They're great people, ch? Durin' the whole trip he hardly makes a move. Mostly he keeps his tamps glued to me, lookin' kind of sad and brotherly, but he don't take any more notice of Cuyler than as if he hadn't been there at sil.

"Hello!" says he, spottin' Mr. El Boom in the far corner of the front office, "where did you pick up the Arab?"

"That's a souvenir I brought back from Coney," says I. "Don't want an A-1 camel driver, do you, Florrie? He says his name is Hassan el Boom."

"Boom!" says he, spottin' Mr. El Boom in the far corner of the front office, "where did you pick up the Arab?"

"That's a souvenir I brought back from Coney," says I. "Don't want an A-1 camel driver, do you, Florrie? He says his name is Hassan el Boom."

"Boom!" says he, spottin' Mr. El Boom in the far corner of the front office, "where did you pick up the Arab?"

"That's a souvenir I brought back from Coney," says I. "Don't want an A-1 camel driver, do you, Florrie? He says his name is Hassan el Boom."

"Boom!" says Florrie, lookin' some surprised and steppin' over for a closer view. "Well, I'll be hanged!" At that be begins tearin' off chunks of jerky Ayrab talk that brings the camel plict to his feet with a broad grin on his face.

Seems that he'd been a kind of a guide for Florrie over in Africa seme-where only two or three years back, and they were old chums. When they'd talked it over for a while I breaks in

When we gets across the bridge, we has Jules steer down to lower Wash-ington street, where there's a whole colony of rug sellers and such, thinkin' that our Ayrab would be right to home amongst that gang. The first Syrian restaurant we comes to I points out the window letterin' to him real enthusiastic; but it don't get him excited a bit. Then we hauls up before

an Ayrab joint I knows of, where they sells all kinds of brass tinware, and I goes in and drags out the boss. Does Hassam fall on his neck like he should? Nover a fall! He just looks him over kind of cool and distant, and then sticks out the back of his hand to him. And say, that First Ward store-

to him. And say, that First Ward store-keeper don't do a thing but kneel on the bubble step and give Hassan the past grand master salute. "Glad he's an old friend of yours," says I "We'll hand Mr. El Boom over to you right here." The storekeeper says it'll be a great distinction if the Honorable Hassan will condescend. Hassan don't make any move to go though.

any move to go, though.
"Frenchy," says I, "give his nibs the
tip that here's his boardin' house."
Jules does his best to make it clear. but Hassan only shakes his head and points to me. We argues the case for ten minutes; but all we gets out of him is that I am the son of a shelk. "Put that in a can," says I. "Tell

"Camels!" says I. "Here, le' me talk to him. Say, you bloomin' long-legged Ayrab, do I look like I owned a menagerie? Nix! Can't use you in my business no way. If I was you I'd chase back to the island and get on the job again. Skiddoo, now! Mushong!"

Say, you never saw any one look so cut up and squelched as that Ayrab. He hangs his head down and acts like a dog that has been kicked under the bed. Even Cuyler, that seldom gets his mind off himself for more'n a minute, seems to think it's too had.

"Frenchy," says I, "you tell him to him me father was a section boss.'
That wa'n't any use, though. Nothin'
was. We tried Hassan on three more Ayrabs, and while they all treats him mighty polite, he sticks to his original proposition that I am it. Cuyler is gettin' more pleased every minute. "Professor," says he, "it seems that

you have Hassan on your hands."
"Ah, say!" says I, "what use have I got for a camel driver?" But unless we chucked him bodily

A ND it looked like there was nothin' doin' too. Say, it ain't often I can work up a feelin' like that in New York either. But you take a pay day afternoon in the bow-wow side of the next hour or so I has what

couldn't do it. So I gives up, and we starts for the studio. As soon as we lands there I rings up the Luna Park people, tells 'cm about Hassan, and asks if they don't want to send for him. They don't. They said if I'd got him I was welcome, and then they rings off. Just as Cuyler was startin' to leave me and Hassan together, in blows Plorrie Powers. You've heard of Florrie? Reportin' wars is his specialty, and when there ain't any wars he's writin' books about them he's seen pulled off.. He knows everybody, Florrie does, from Jap and Russian Genrie does, from Jap and Russian Gen-erals to chaps like Cuyler and Swifty "Hello!" says he, spottin' Mr. El

guide for Florrie over in Africa seme-where only two or three years back, and they were old chums. When they'd talked it over for awhile I breaks in

and remarks:

"He's yours, Florrie; you saw him first. But what's this about his callin' me the son of a sheep?"

"Sheik," says Florrie; "that means chieftain, the big man of the tribe. His father is one, you know, and he says you have the noble bearing of a leader, too. Besides, you gave the signal of the Grand Louge of the Desert. How about that?" How about that?"

How about that?

When I explains to Florrie that it was just a bluff of mine, and asks him to beat it into Hassan's nut that I can't have him hangin' around, they

has another powwow.

"Well?" says I, after it's over.

"He wants to go back to Arabia,"
says Florrie.

"Good!" says L "Good!" says I "But he's broke." says Florrie. "I can't afford to send him back; and it surely isn't up to you to buy his ticket. Here is Cuyler, though."
"Me!" says Cuyler, turnin pare.

"Why not?" says Florrie. "You have more money than you will ever know what to do with haven't you?" "Sure thing!" says I. "Cayler, you're

Well, of all the squirmin' and cryin' poverty. Cuyler gives the prize exhibi-tion. He wants to make a break for

home right away.
"Walt a minute," says Florrie, "while

I tell Hassan about it."
At that he lines the camel driver up
in front of Cuyler and gives a lecture that must have been real eloquent. You didn't need to understand the words to know that Florrie was tellin' how rich Cuyler was, and how it hurt him to part with a dollar. But the best part of the show was watchin' that Ayrab's

The way he takes Coyler's measure,