

Rediscovering ILLINOIS

by LESTER B. COLEBY
ILLINOIS CHAMBER OF COMMERCE

Like Gold Dust

Imagine gold screws so fine that they look like gold dust; 20,000 of them to fill a thimble! Imagine steel screws so small that a pile of them scattered about appear like pepper—yet each one threaded, a slot in each head so that they can be screwed in.

A row of girls sit turning these gold screws into balance wheels. My guide remarks:

"That's a job no man has ever been able to hold. You or I couldn't get a screw in place in fifteen minutes. But that girl will put in 4,000 in eight hours."

Poising the balance wheel, I learn, is a delicate job. The rim of it is of brass, welded on steel. Why not all one metal? The two metals to pull against each other and overcome expansion. In testing the balance wheel it is twirled on jewels. If it does not stop dead one or two of these minute, dustlike screws will be removed and others substituted until it does. In the smaller watches a hundred of these screws, side by side, will make an inch. Each is threaded, 360 threads to the inch.

Marvels of Watch Factory
This Illinois plant, the greatest watch factory in the world, is amazingly equipped with automatic machinery. Two men running fourteen machines drill 125,000 holes in a day in one department. One man, who cuts 1,100 different kinds of "blanks," makes 70,000,000 in a year.

Jewels of sapphire, garnet and ruby are cut so thin that 333 of them make only an inch. Holes are "lapped" through them with filaments dusted with diamond powder. These threads, almost like bits of spider web, twirl at the rate of 36,000 revolutions a minute! I was shown a two-ounce bottle and told that it held \$1,200 worth of diamond powder.

We paused at another mysterious machine, working behind panels of glass, and my guide revealed that it was handling as many tools as 142 men would work with in the good old days of hand-made things. Only this machine worked with much greater speed and with far more accuracy!
"But it is not going at capacity

now," my guide apologized. "When it does it operates 184 drills and twenty taps. No workman could ever handle more than one tool at a time."

Year to Make Watch

It comes as somewhat of a surprise to learn that the process of making a watch from raw materials requires about a year. Yet so steady is the flow of materials through the Elgin plant that the 4,500 persons employed turn out just about 4,500 watches every working day.

I've always presumed that it must be something of an annoying job to polish the hands of a wrist watch such as a lady must wear today to be in step and style. Easy. Dust a shower of them onto a piece of leather. Bam-m, with a mechanical hammer. Polish them all at one swift operation and, bam—out again!

It's a clever bit of a machine that sorts the microscopic jewels that go into the watches automatically. They go into a magazine and each, fragile thin and smooth-polished, must be put there right-side-up. The machine that does it works with speed but infinite care.

And how big would you guess the cross-section of a hair-spring might be? I am told that it is 2-1,000ths of an inch one way and 4-1,000ths of an inch the other. Operations in watch-making measure down to 1-10,000 of an inch!

Human Skill Factor

But all cannot be automatic. Otherwise why the 4,500 workers? Human skill plays a large and an ever-present part. The head of a department said: "Sometimes when an old employe dies or leaves it is necessary to put on as many as four persons to do his work for the flow through the plant cannot stop. The accuracy in minute things acquired by constantly doing the same thing over and over again is startling. One woman placed 4,000 pivots, a delicate operation, so accurately that only 200 of them varied more than 2-10,000ths of an inch."

Here let me give you two watch-facts,—from experts to be to you: The fellow who started the story that you mustn't turn a watch backward in setting it didn't know what he was talking about. It is all bunk unless the watch strikes.

Wind your watch in the morning rather than at night. You rise more regularly than you go to bed and the main spring will stand the jars of the day better if partly wound.

Windmills, Too

Let us turn to windmills. The Elgin Windmill company has been making windmills and nothing but wind-

mills for forty years. Bert H. Yarwood, secretary, a reformed newspaper reporter, says:

"Last week a carload of our windmills went to the Rifian war front via Tunis, Algeria. A half carload went to LaPallice, France. Another half-carload is this week crossing the Andes from Mollendo, Peru, to LaPaz, capital of Bolivia. From Cape Town to Shantung you'll find Elgin windmills—wherever there are better farms."

Bert wanted to tell me all about how his windmills are dustless, speckless, vaneless, running in oil—these ex-reporters are quick with publicity in sight.

Police say that the cheaper types of automobiles are most frequently stolen. A business-like thief recognizes the advantage of quick returns and small profits.—Washington Star.



GOOD PURE FOOD—we serve no other kind. Every particle of food that comes to our kitchen is carefully selected and inspected before it is cooked and served to you in proper style.

Get acquainted with our "Bill o' Fare"



BLACK CAT SHOPPE

59 S. ST. JOHNS AVENUE
Phone H. P. 249

RAILROADS REDUCE DAMAGE CLAIM TOTAL

Increased Co-operation Between Shippers and Carriers Aiding

Despite increased traffic, the railroads of the United States reduced the amounts of loss and damage claims from \$45,975,675 for 1924 to \$36,760,941 for 1925, a saving of more than \$9,000,000. Compared with 1920, the loss and damage claims in 1925 show a cut of two-thirds, accomplishing a net saving of \$83,072,000, and the number of claims was halved. The record also shows that 70 per cent of all the claims settled in 1925 were set-

tled within thirty days, and that 80 per cent of the claims settled last year were settled with ninety days. At the end of the year the number of unsettled claims was 204,962, as compared with 542,393 at the end of 1920. In less than one-half of 1 per cent of the claims were there court proceedings, according to a writer in the Nation's Business.

Progress is steady in establishing co-operation between shipper and carrier in eliminating the economic waste of bad packing, rough handling and dishonesty. Methods for economical and scientific packing are diligently developed. Losses from theft

and robbery were decreased from \$12,875,000 in 1920 to \$1,492,000 in 1925. One hundred thousand arrests are made, as an annual average, by railroad police, and convictions in 90 per cent of the cases are reported.

Such are the fleshless details, the bare bones of some of the contributions of America's railroads to be elimination of waste in industry. By their useful works are the roads able to hold the public's confidence and custom. Their managers are showing that they know good service for a dependable source of good will.

Auto Radiator Shop

Geo. J. Wilkman, Prop.

We repair or rebuild any make of Radiator. Take bumps and dents out of your Auto Bods and Fenders.

Drive your car in and get estimate.

513 Elm Place

Highland Park

Telephone 2774

Good Through and Through

Details tell impressive story of quality standards strictly maintained



Unprecedented sales prove how well the public knows that Dodge Brothers Motor Car is sturdier and more dependable than ever before.

Delivers more miles at lower cost-per-mile. Stands up under harder going. Calls for fewer repairs. Provides greater safety. Excels in every quality that has earned its good name.

In fact, you have only to check any chassis part against its own past best—engine, axles, gears, bearings, frame, springs, shafts, electrical equipment—to prove how strictly and consistently Dodge Brothers have preserved and improved the basic goodness of their product.

Touring Car	-	-	\$854.92
Roadster	-	-	\$853.82
Coupe	-	-	\$906.16
Sedan	-	-	\$959.90

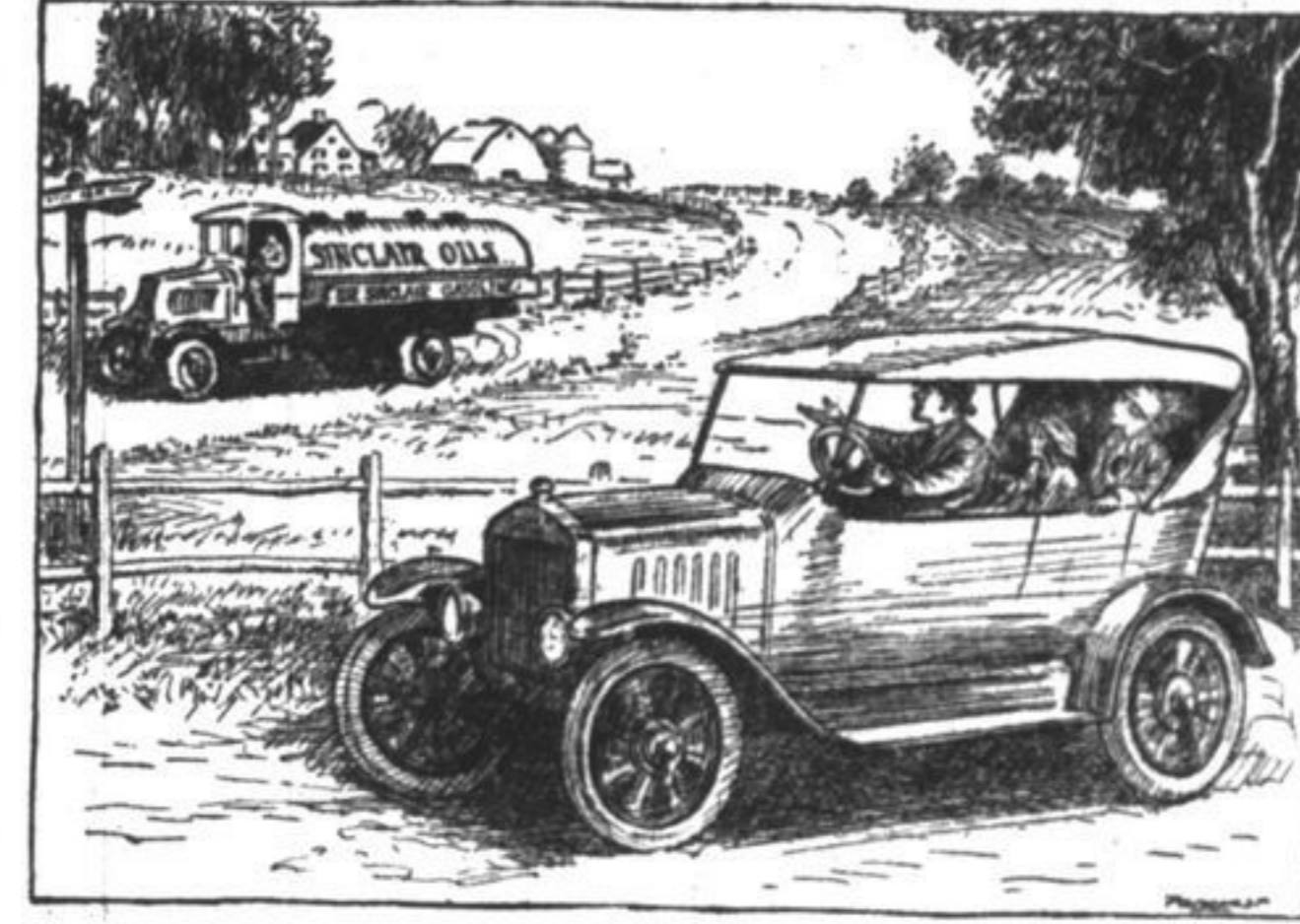
A. G. McPherson

Highland Park

Phones 120-121

DODGE BROTHERS MOTOR CARS

"ALONG GOOD WILL HIGHWAY"



To Keep Your Ford Car Silent and Smooth

YOU WILL be pleased to find out how Sinclair Opaline "F" Motor Oil improves the engine performance of your Ford Car or Truck.

You know Ford Engines are different from other engines—you know they need a special lubricating oil—not only for the engine, but to keep the band linings pliable. Sinclair makes that oil expressly for Ford Cars. It is Opaline "F"—to keep your Ford Car silent and smooth. It seals your engine's power at every degree of wear—lessens the dilution and keeps your upkeep down. Try this quality oil under any road conditions. It is worthy of your confidence.

Ask your neighbor what he thinks of Opaline "F". The Sinclair dealer will be glad to tell you about it. Let him give you a copy of "Oiling"—Sinclair's new help-booklet for motorists.

SINCLAIR OPALINE "F" MOTOR OIL
Seals Power at every Degree of Wear



BUY IT IN A HANDY DRUM—THERE'S A SAVING