

BANDIT'S BULLET, BOY'S SMILE, HELP NEW MOTOR DEVELOPMENT

PHOTO STUDY OF MOTOR INVENTOR

Hendershot, Wounded, Perfects Invention That Startles World.

AN AMAZING story of a man with a "big idea" and no chance to develop it until he was laid low by a bandit's bullet, is the story of Lester J. Hendershot and his fuelless motor which now promises to revolutionize the world.

Hendershot's story is the story of thousands of inventors—men who have had big ideas but who have been laughed out of them.

Only Hendershot was not laughed out of his.

Rather he was laughed into it—or smiled into it, perhaps—by his little boy.

It was this little boy, Lester J., Jr., who prompted Hendershot to build the motor that now bids fair to outdo the inventions of Bell, Edison, Marconi and others of equal fame.

Up in West Elizabeth—that's where Hendershot lives—one might have gone to almost any person a few weeks ago with the query: "Is there a fellow named Hendershot around here?" and the person addressed would probably have looked rather curiously at the inquirer for a moment before answering.

ALL DOUBTERS.

And then he might have said: "Oh, yes, he's an inventor," with one of those "dirty laughs" that the world knows much about.

But today it is different. Of course everybody doesn't believe in Hendershot and his motor, and some may still give vent to the "dirty laugh", when his name is mentioned, but generally there is a feeling now that perhaps the little town has harbored a genius who was laughed here and there and everywhere while his mind nurtured an idea so big that even he couldn't grasp it himself.

Hendershot really had the idea of a motor that would run without fuel for years, but he hadn't any idea just how he could put his idea into action.

His great discovery came almost by accident.

Hendershot was at various times a railroad fireman and an engineer. He had an ordinary school education and spent a little time at Cornell. At Cornell, where he gained entrance only for some special study, he experimented on various things, but his residence there was short and he was soon back at his home.

His last job was as a concrete inspector on the new Clairton road.

COMES THE "BREAK."

About a year ago came the "break" that promises to make Hendershot's name famous, in addition to changing the world's whole scheme of doing things.

On his way home one dark night, rather late, Hendershot heard the gruff command of a highwayman to "stick 'em up."

Hendershot didn't stick 'em up. In fact he did what most persons wouldn't do with the business end of a revolver pointed where man can see it best. He didn't fight, or attempt to disarm the thug. He had an idea then that his legs were given him for the purpose of run-



Here is Lester J. Hendershot of West Elizabeth, who has startled the world with a fuelless motor that is said to take its power from the magnetic field which surrounds the earth.

Top left shows Hendershot and his son, Lester J., Jr., whose demands for a little airplane that would run started his father at work on the small motor which ultimately resulted in his fuelless motor. Hendershot worked on the invention while recuperating from a bullet wound in his foot after he had been held up and shot in Clairton several months ago. The model plane which the boy is holding is the one in which the original motor was installed.

Top right is a close-up of Hendershot, the inventor, who returned to his home from Selfridge field, Mt. Clemens, Mich., where he demonstrated his invention to Col. Charles A. Lindbergh and Maj. Thomas G. Lanphier. William B. Stout and engineers of Henry Ford also have inspected the motor.

Bottom—Hendershot, left, and his business partner, D. Barr Peat, manager of Bettis field, who has been responsible for the interviews with Lindbergh and other prominent in the field of aeronautics.

ning, as well as walking. And run he did—but he didn't run fast enough.

The bandit was not to be cheated out of his little fun, so after the fleeing Hendershot he sent a bullet, which of course traveled faster than the man. Could Hendershot have taken another step at the moment he perhaps would have escaped, for the bullet just clipped him in the ankle. He has always thought that if he could have lifted that one foot just a fraction of a second sooner

he would have been missed, but then if he had, this story perhaps would not have been written and the world would have been none the wiser.

Hendershot would have gone down in history only as "an inventor" and a man who was shot by a bandit.

MEANS MUCH.

But he didn't lift the foot and the bullet imbedded itself in one ankle, and thereby, as the storybooks will say, hangs the tale—the tale that the world is reading now with great-

er interest than the story of Lindbergh's flight across the Atlantic, perhaps with greater interest than the story of the World war, because it means more to the world, no doubt, than any war ever meant.

The bullet laid Hendershot up. He was able to get about, of course, but not as the rest of us just at that time.

It was then that the smile of the little boy—Lester, Jr.—did its work. Far, far different from the "dirty

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BANDIT'S BULLET AND BOY'S SMILE AIDS MOTOR DEVELOPMENT

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"Laughs" that most great inventors have had to bear, was the smile of Lester, Jr. Lester wanted an airplane one time and "Dad" Hendershot made him one—a model plane that looked as good as a big one but simply wouldn't run.

And Lester, Jr. must have an airplane that would run.

How to do it?

"Dad" took the model he had made and hollowed out the solid wood block that formed the front part of the ship. He hollowed it out so that a tiny motor could fit in it. He didn't have an idea at the moment that he was going to perfect a motor that he could sit in the model and see it run, but he started to work on some kind of a motor to fit the engine.

WINDS COIL.

He made a magnet. Some experience at the Westinghouse plant had given him that knowledge.

But how he made it was the secret—and is the secret—of the motor that now operates without fuel.

When he had finished the motor and put it in the plane—he did all this in the cellar at home, down by the furnace and up against a coal pile—he sat the plane down on an ordinary library table, intending to leave it there for the time.

And then it happened!

The propeller on the model started to turn!

Hendershot looked. Then he looked again. Then he rubbed his eyes and took a third look. But the thing wasn't fooling at all. The

propeller was whirling away at a great clip.

Hendershot picked it up and sat it down again. The propeller stopped. He turned it around the same way it had been sitting before and the propeller started again. He turned it the other way once more and again the propeller stopped. And finally he discovered that when the ship headed north or south the propeller whirled, but when it headed east and west it stopped.

Henderson didn't understand it. He knew that a certain magnetism was operating the propeller when it headed north or south—that's all.

He went out to Bettis field "just for fun" with his little plane and the whirling propeller.

There he met Barr Peat, manager of Bettis field, and in a blunt way he said, perhaps not in these same words, but words similar: "Here, look at this thing."

PEAT IS AMAZED.

Barr Peat looked at it, and the more he looked and examined the more amazed he was.

And the more amazed he became the more certain he was that it was something great. So he took Hendershot "under his wing," so to speak, advised him against talking and started to do a little investigating. And the more he investigated the more he became convinced the world had something new and different and tremendous coming to it. Investigation strengthened his belief in it, instead of cooling his enthusiasm.

Stout, the big airplane man from Detroit fell into the thing with the same enthusiasm as did Barr Peat, when Peat had laid the idea before him. Then came Lindbergh, Lanphier, the Guggenheim Foundation and others.

And then came the news to the world—the story of the fuelless motor.

The fuelless motor will be tested further in New York, under the supervision of the Guggenheim

LET'S GO

"All I'll need to fly around the world now will be a bigger basket of sandwiches."

That's the comment attributed to Col. Charles A. Lindbergh when he first saw in operation the fuelless motor, invented by Lester J. Hendershot of West Elizabeth, at Selfridge field, Mt. Clemens, Mich., last week.

Lindbergh is in New York arranging for further tests and the development of the new motor under the auspices of the Guggenheim Foundation for the Promotion of Aeronautics.

Foundation for the Promotion of Aeronautics, and if it is as successful in tests there as it was at Selfridge Field, Mt. Clemens, Mich., a motor will be placed in an airplane designed by Col. Lindbergh and Hendershot, the inventor declared in an interview yesterday.

LANPHIER ENTHUSED.

Maj. Thomas G. Lanphier, commander of the First Pursuit squadron of the U. S. air service and companion of Col. Lindbergh is quoted by Hendershot as saying that the fuelless motor, because of its inflexibility is the ideal power for airplanes, because of its constant speed and power, at any altitude or under any conditions.

The main secret of Hendershot's invention, he declared yesterday, is the method of winding a magnet in the motor so that it will rotate in the opposite direction that the earth revolves. He declares there is no heat because magnetic forces are cold and the motor is stopped only by breaking the magnetic field in the windings. However, he declares that the magnet in the motor probably would have to be recharged after about 2,000 hours of operation. No airplane motor ever built has

been known to run more than 1,000 hours.

The model that was taken from Selfridge Field to either New York or Washington with Col. Lindbergh last Saturday, is 10 times as large as Hendershot's original motor, and develops about 30 horsepower at 1,800 revolutions per minute, although it weighs less than 10 pounds.

Henderson declares that one of his motor complete and ready to be installed in an airplane would weigh little more than four ounces for every horsepower it develops, whereas the Wright Whirlwind airplane motor, conceded to be among the best of the engines built in the world weighs approximately two pounds per horsepower.

MANY TESTS.

At tests at Selfridge Field Hendershot said the motor operated in every position in which it was placed to determine whether it would operate in a plane if it were lopped, spun, dived or flown upside down. The inventor and Barr Peat, his business manager, declared that the motor's speed remained constant in every position.

Hendershot declared that it is not his intention to apply his invention, at the present time, to any other field except aviation. He points out that altitude would mean nothing to the efficient operation of his motor for the magnetic influence of the earth has been found to remain the same as high as man has ever reached. In altitude tests by the army and navy it has been learned that a compass operates the same at 20,000, 30,000 and 35,000 feet above the earth and the same influence that operates the ordinary compass is the only power used to operate the fuelless motor, according to the inventor.

It has been necessary in altitude tests to carry oxygen to supply the gasoline aviation motor through a supercharger because of the rarefied atmosphere encountered at such

heights, but Hendershot declares his motor will operate as high as man can fly.

Hendershot said he found in one of the first models he constructed that the motor would operate only when it was placed in a true north and south direction, but in a later model he overcame that difficulty. However, he said, the same principle which made the original model operate only when it was placed in the one direction, will be developed so that it will provide a compass that will always indicate true north, a device that will mean as much to aerial navigation as the motor does to the operation of planes.

Further tests and the development of the fuelless motor, Hendershot said, is entirely in the hands of the Guggenheim foundation and Col. Lindbergh. Hendershot and Barr Peat when further tests on the large model are begun.