



Champion COMMUNITY Page



Steam powered plant reborn thanks to volunteers

Testament to ingenuity of craftsmen from bygone era

By BRAD REAUME
The Champion

Ingenuous steam powered operations of a bygone era are testimony to technological progress and the minds of those who made them.

"You can't stop progress," said Tom Salisbury, a member of the Institute of Power Engineers. "However, everything that's been developed happened because some lazy guy got tired of doing things by hand and developed a machine to do it while he watched."

Mr. Salisbury is just one of many people still entranced by the smooth operation of steam powered equipment used 100 years ago. He and other members of the Institute of Power Engineers are helping to put a shingle factory back in operation at the Farm Museum, (formerly the Ontario Agricultural Museum).

The operation will be up and running during the Great Canadian Antique Tractor Field Days next weekend (July 17-20). The Massey-Ferguson 150th Anniversary celebrations will be held at the same time.

Mr. Salisbury said even nuclear energy is merely a different fuel source used to generate steam power. Many industries still run machines on steam, including paper and steel mills. A steam powered car set a land speed record of 95 miles an hour around 1910, he said.

"Steam power is very efficient, the problem is you have to haul the big boiler around with you," Mr. Salisbury added.

Carlisle resident Steve Bratina is behind the push to get the shingle mill working again. The museum volunteer also has experience with the Steam Era show in Milton and the Steam and Technology Museum in Hamilton. The Hamilton museum is built around a mammoth steam engine used to pump water for the municipality in the early years of this century. The engine, which drives a 22-foot flywheel, used to be run every weekend for public display, but concerns about the integrity of the equipment have kept it inoperative for some time.

Mr. Bratina showed off the shingle machine, speaking of the musical sound of steam engines and the intoxicating scent of

oil. "I think this is just the greatest thing around," he said.

Now retired, Mr. Salisbury, a navy veteran and operator of steam equipment at Hamilton's Proctor and Gamble, said Mr. Bratina was born 50 years too late.

The shingle machine's boiler is able to produce about 15 horsepower while using about 100 gallons of water during an eight hour working day.

Boilers can be touchy. According to Mr. Salisbury, an explosion at an American shoe factory years ago brought down the entire enterprise. An explosion in the shingle machine's boiler would blow metal parts several hundred yards or maybe as much as a mile, he said.

"It's the pressure of the steam," he said. "If it can it will expand violently. One cubic foot of water at 100 pounds pressure has the explosive force of 54 pounds of gunpowder."

However, there are numerous safety measures built into the big boiler, including release valves for pressure, water level gauges and shutoff equipment.

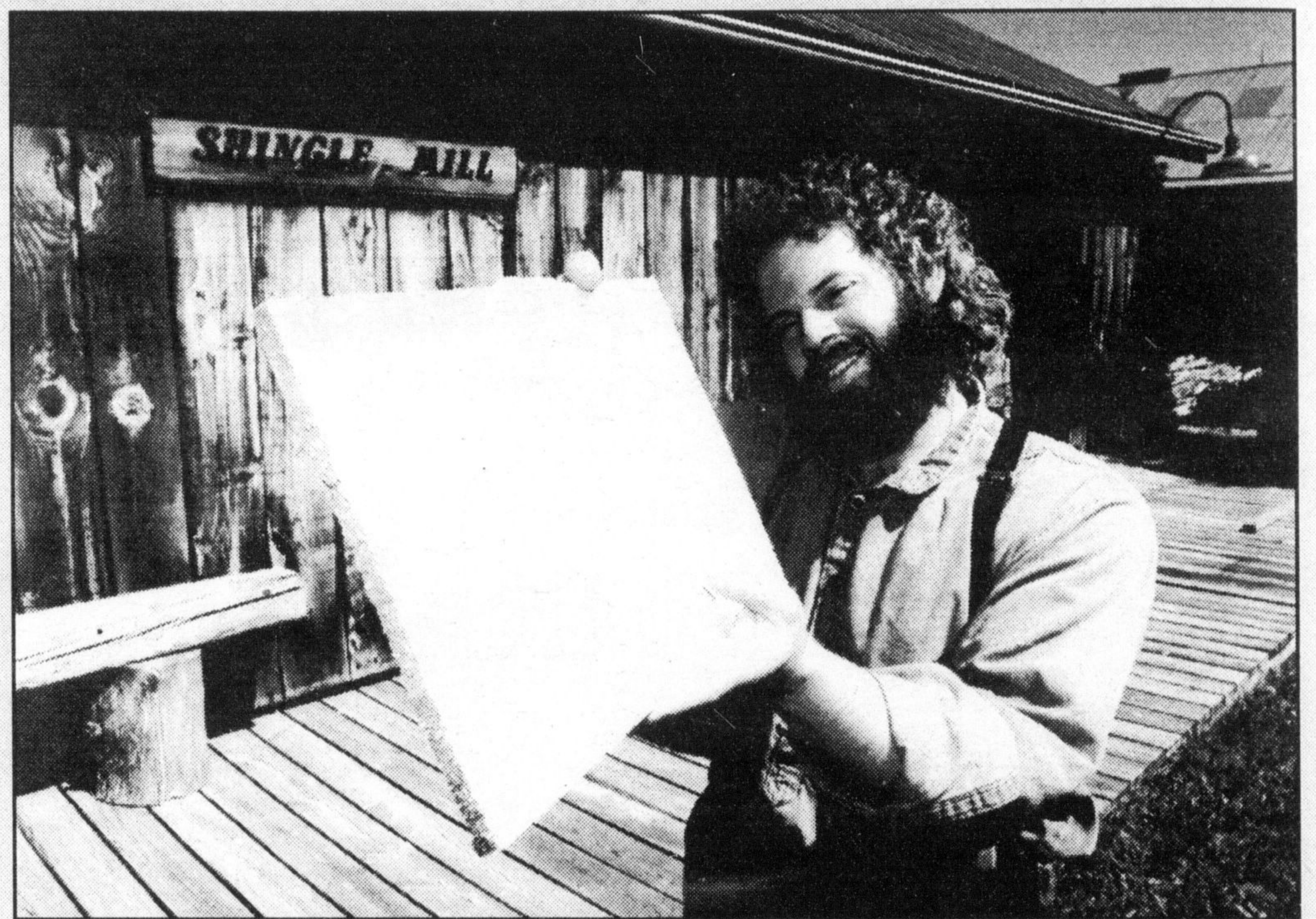
The shingling device shows the ingenuity of man. With roughly machined metal parts the shingler could produce a high quality product even by today's standard.

"Shingles were important years ago, they were the only thing to build a roof out of other than thatch," said Mr. Salisbury.

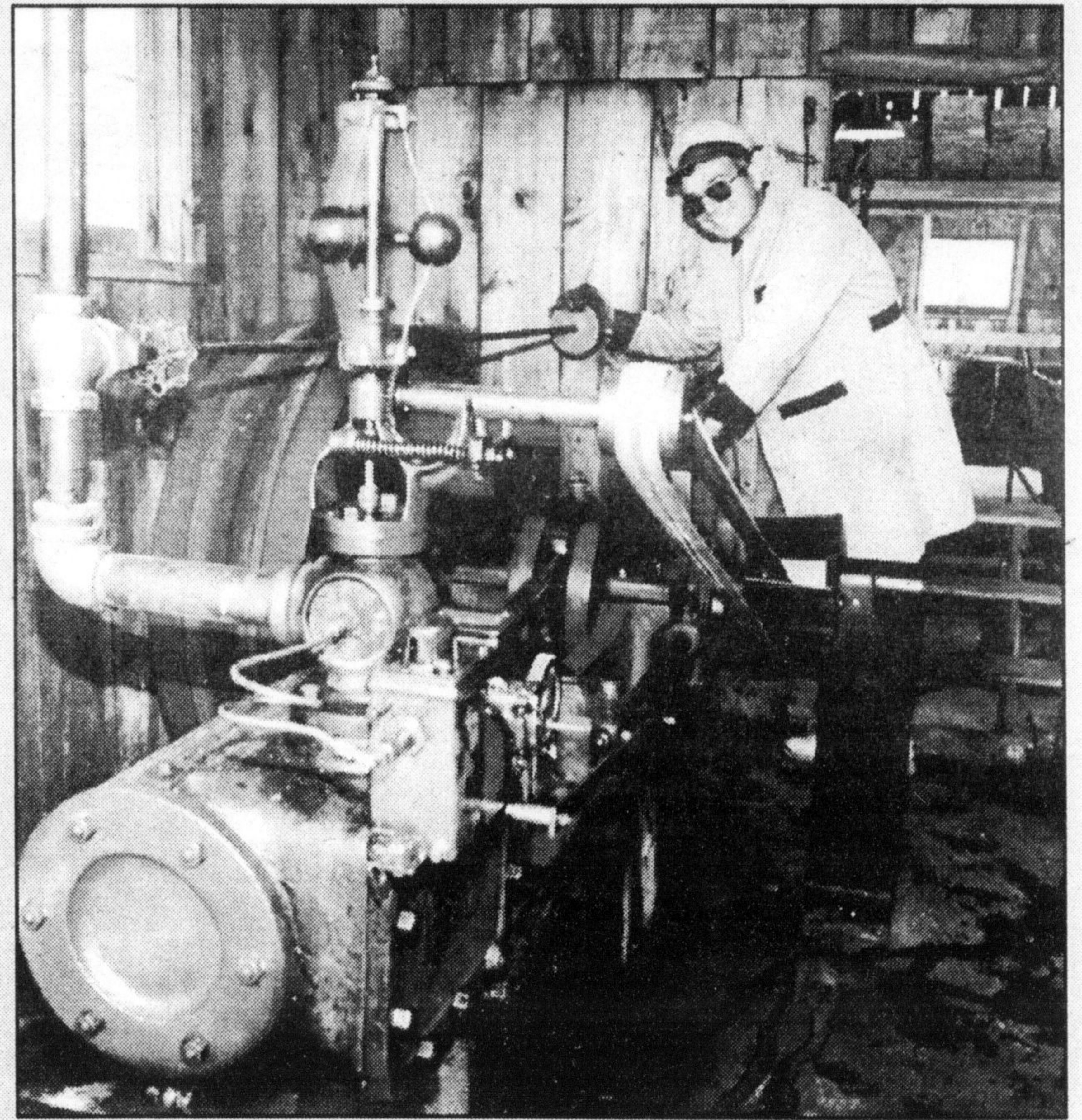
Another steam engine aficionado, Don Flear, explained several attachments to the main machine. One pumped oil to moving parts and another, a governor, helped keep the whole engine running smoothly at a constant speed.

Mr. Bratina said he is hoping that organizational problems between Steam Era program and the Farm Museum can be worked out to allow for one huge steam power show. He added that the cost of boiler inspections and the questionable integrity of boilers after many years of use could mean the steam power shows will eventually become a thing of the past.

The shingle factory machinery at the Farm Museum was donated by the Thomas family of northern Nassagaweya. They used their mill beginning in 1912 to help diversify their farm operation. They continued to sell shingles until 1940.



Farm Museum interpreter Garth Dallman (above) checks out the plane on one of the shingles manufactured in the refurbished facility while (right) Steve Bratina adjusts the throttle on the mill's power-plant.



Photos by Graham Paine

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