

## Magical machines

Students take on simple problems in Young Inventors show



Photo by Katie Barnes / Monitor staff

Brian Tremblay, left, and Michael Eismann, right, prepare to launch the "Recycle-a-rube" invention as Tremblay's father, also named Brian Tremblay, far right, watches, at the Young Inventors Program at Merrimack Valley High School in Penacook on Saturday, March 26, 2011. Tremblay and Eismann, fourth graders from the Gilmanton School, showcased their own inventions on the second floor of the school.

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By [Ben Leubsdorf](#) / Monitor staff

Press down on a toy dog's head to start a marble rolling down tubes, knocking down dominos that push a model fire truck attached to a string, which in turn activates a lever, dropping a teabag into a Mickey Mouse mug.

"It makes a cup of tea," Bow Memorial School sixth-grader Robby Ciotti said of his Rube Goldberg machine.

But what's the point?

"Just to take a task that's very simple and make it fun," he explained.

Ciotti, 11, was one of about 155 children from about 40 schools across the state who gathered yesterday morning at Merrimack Valley High School in Penacook to show off inventions and Rube Goldberg machines at the Young Inventors' Program annual show.

Sponsored by Fidelity Investments, the program includes children from kindergarten to seventh grade and was judged by an array of lawyers, engineers and others, said program Director Pamela Hampton.

Shelly Temple, who works at DEKA Research and Development in Manchester, has volunteered behind the scenes at the program for a decade.

"For me, I'm a patent attorney, and I believe in invention," Temple said. "If you inspire it when they're young, they're going to grow up to be inventors."

Rube Goldberg, who died in 1970, was a one-time engineer and Pulitzer Prize-winning editorial cartoonist who drew elaborate devices performing simple tasks, which inspired people to actually build such devices. More than a dozen were on display in the high school's gym yesterday, moistening envelopes, turning keys and activating a hammer to hit the snooze button on an alarm clock.

Samantha Benoit and Maggie Jensen, both in the seventh grade at Bow Memorial, showed off their "Kat Kadoodle," which used marbles, strings, levers and cups to ring a bell and drop cat food through a chute into a bowl.

"It took us like 14 hours to do it," Samantha said. "It was crazy."

Gracie McBride, a third-grader at Memorial Elementary School in Bedford, designed "The Envelope Sealer 5000," which used a Hess toy dump truck, string and dominos to moisten an envelope with bits of sponge.



Photo by Katie Barnes, Monitor Staff

Bow's Bobby Ciotti created a Rube Goldberg invention called "Tea Time" that he displayed at the Young Inventors Program at Merrimack Valley High School in Penacook on Saturday, March 26, 2011



Photo by Katie Barnes, Monitor Staff

Emma Moley, left, and Emily Noonan, right, give a presentation to their family of their Rube Goldberg invention, "The Alarminator", at the Young Inventors Program at Merrimack Valley High School in Penacook on Saturday, March 26, 2011. Purchase photo reprints at PhotoExtra

After the judges sized up her machine, Gracie, 8, said she thought the demonstration had gone well.

"I'm glad I didn't mess up on this," she said, touching a rod, "and sometimes this thing (a cup) falls early. But luckily, that didn't happen."

Upstairs, scores of invention models were on display in classrooms, including "pillow pants," snowpants with extra cushioning sewed in for "when you fall down while you're skating," and a solar-powered towel-drying rack called the "Eco-Dry."

"Most bathrooms are not ventilated well," the display read. "So hanging a wet towel does not dry well. They become unhygienic and VERY SMELLY."

Third-grader Brianna Rainey from Riddle Brook Elementary School in Bedford designed "The Pocket Locket," which attaches cell phones to seatbelts for hands-free use.

She said was inspired to make the device after seeing an episode of ABC's Extreme Makeover: Home Edition featuring a young woman who died while texting and driving.

"I didn't really have a fabric, so I used a kind of stretchy thing," the 9-year-old said. "It's kind of hard to explain."

Belmont Elementary School third-grader Paige Irving built a model of a bobhouse that won't sink if it falls through the ice on a frozen lake, because the shanty's bottom is reinforced with Styrofoam.

"Five to 10 bobhouses sink every year, according to the New Hampshire Fish and Game," Paige, 9, explained.

The Young Inventors' Program helps kids expand their horizons, said Kathleen McIntyre, a library media specialist at Clark/Wilkins Schools in Amherst who has volunteered with the program for 21 years.

"It brings together their ability to be creative and to be a little salesperson. . . . Often my best inventor is the quietest, and they just amaze me," McIntyre said.

Some kids wore ties, and others wore homemade T-shirts with their invention's name on them as they exhibited their wares. One girl wore a white lab coat and fake mustache as she demonstrated her Rube Goldberg machine.

Alex Watson, a third-grader at Peter Woodbury School in Bedford, wore a conical wizard's hat as he explained his "Sink Bib," a modified towel "to keep the vanity clean and the countertop; you don't get toothpaste or mouthwash on it."

The inspiration for the mess-prevention device came at home, Alex, 9, said.

"My mom and dad yell at me all the time for it," he said.

And the hat?

"I just felt like buying it," he said.

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