

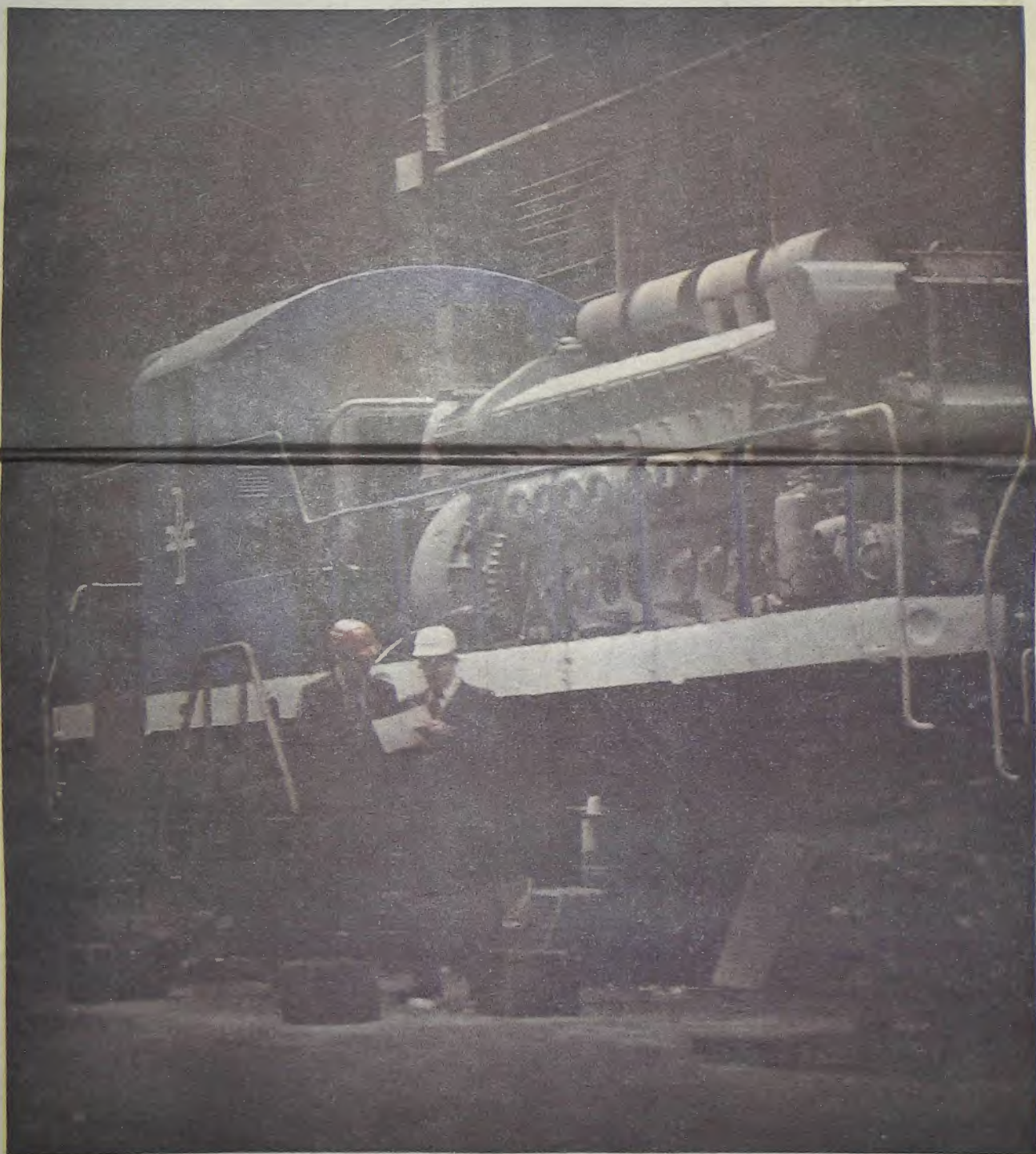
THE LOWELL SUN



# SUN/day

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**The B & M makes a comeback**

# Once mighty railroad is . . .

By RALPH J. JACOBS  
Sun Staff

**NORTH BILLERICA** — The Boston and Maine Railroad, which in March, 1970, filed for bankruptcy, recently reported a net increase for the month of August and said "this was the second month in succession the firm had increased its earnings."

While the figures for the month of September will not be fully ascertained until late in October, Alan G. Dustin, the B and M's new president this week said "we are quite optimistic the trend will continue." If it does, the railroad will have passed a milestone. It will have increased its net earnings for three successive months, a feat it has not been able to accomplish since it filed for bankruptcy.

What has happened to our once-mighty railroads? How does it happen that a large corporation finds itself on the verge of bankruptcy? How does it happen that a large industry like the Boston and Maine railroad, which knew nothing but progress and growth for an entire century, all of a sudden finds itself slowly deteriorating and in deep, deep trouble? And, how does a railroad pick up the pieces?

**THE PROBLEMS** which have beset the Boston and Maine Railroad only serves to mirror what has happened to most of the nation's railroads, not once, but twice in this century.

While the railroads as we know them first originated in England in the 18th Century, and the first American railroad, ironically as it may be, was started in Quincy, Mass. It was a horse-drawn tramway used to carry the granite with which the Bunker Hill monument was built. The year was 1813.

It was little more than two decades later when the original Boston and Maine Railroad came on line. It was an outgrowth of the *old Andover and Wilmington Railroad*, chartered in 1833. The Boston and Maine was chartered in the state of New Hampshire, on June 27, 1835. This was only eight years after the Baltimore and Ohio Railroad became the first railway in America to be chartered as a common carrier of freight and passengers. On Christmas Day, 1830, the South Carolina Canal and Railroad Company became the first in the United States to start scheduled passenger operations using a steam locomotive.

Reports would indicate it was during this decade (the 1830's) that many railway systems (and the five-foot gauge line) cropped up. Many of them became the nucleus of the so-called giants of the rail industry.

**BY 1840** there was 2,500 miles of track in the United States, and the nation was apparently poised for what was to be a great era of railroad construction. And, amazingly enough, that era of enchantment and wonder was to continue for more than 100 years.

The railroads had pushed west from Chicago. They were to help "civilize" the Western frontier. The headlong growth of the railroads was in full swing, and while it was reported the Civil War slowed the progress, it did not stop it. In fact, four years after the



SUN Staff Photo by Pigeon

## Miniature control panel

Roland Dery dispatches trains from the Lowell tower of the B & M RR. From an office like this, one man can make track switches electronically. It provides for electronic scanning (remote control) and the movements of trains can be directed from a distance of a few to hundreds of miles.

Civil War, America was to witness the first transcontinental. Twelve years later, in 1881, the Atchison, Topeka and Santa Fe joined rails with the Southern

Pacific in New Mexico to launch the second transcontinental.

The railroads did have some problems during the so-called post-Civil War

era. A number of lines were forced to ask for government aid in the form of land grants, and loans. If anybody had any doubts though about whether or not the railroads made any money in those days, there are government figures which indicate that six pioneer Western railroads, which had borrowed \$65 million from the government (most of it used to push across prairie and through the mountains) paid back a total of \$167 million in principal and interest.

There were also rate wars during that era and since the railroads did enjoy a monopoly over domestic transportation, the government finally decided it was necessary to regulate the railroads. While at first regulated by some of the state governments, the federal government, as the result of public sentiment finally passed the Interstate Commerce Act of 1887.

The railroad networks had just about reached their fullest extent by the turn of the century. In those days, the B and M trains traveled as far as Sherbrook, Quebec, in Canada. In fact, according to Lawrence Boyd, who is the B and M's chief design engineer, the Boston and Maine track mileage at that time was 2,300 as compared with today's 1,497.

**IN 1913**, WHEN the B and M first came to Billerica, the town was quite



## Cover

B & M RR vice president Dave Hughes and shop manager Lloyd Keirstead look over progress on a rebuilt diesel locomotive in the railroad shops in North Billerica. It might be worth mentioning that the engine that powered the first freight train which replaced the Middlesex Canal barges in the early 1800's was also put together at this location. Sun staff colorphoto by Mike Pigeon.

# ... finally making money again

small "so the railroad had to be self sufficient," said Boyd. He talked about the B and M's own fire protection, its own sanitary sewer system "including the filter beds," and the fact that in those days there was no commercial power available.

Alan MacMillan, another engineer explained "if there was any commercial power, there certainly was not enough available to serve the needs of the entire yard." The B and M yards, much of which has long since been sold or leased, once measured 600 acres.

The B and M had installed its own power plant. All of the water had to be pumped by steam and all of the buildings were heated by the recirculation of hot water. Little could anyone have dreamed of the problems the B and M would have with the federal government's Environmental Protection Agency in the 70's and of the multi-million dollar project this would entail. The fact is, at that time (in 1913), the power plant constructed by the B and M was the most modern available.

While the railroad building in the United States had slowed in the early years of the 20th Century, the railroads did not stop in their attempts to improve service and equipment. Then it happened. A new era for the United States. The economic depression was upon us. And while the depression dealt the railroads a real disastrous blow, part of the problem, or problems, it was said that the railroads were still 19th "century-ish" while the rest of America was advancing into the 20th Century.

The emphasis was on speed, more efficient operations, improvements in design and practice and quite naturally greater profits. Some believe it was the creation of the automobile which started the big change. In any event, the railroads, which literally had their own way for more than a century, were now in trouble.

The automobile, it is said, became a force behind a complex of industrial and social changes. In the cities, there were major changes to the original designs and the layouts of streets. Cement and concrete highways became necessary. Other new forms of city transportation were introduced. The population of the great cities was growing.

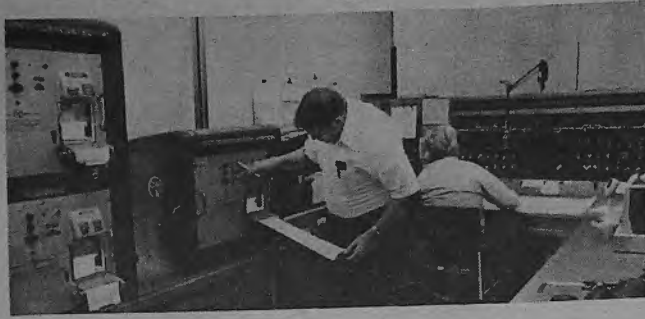
Twenty years later the railroads were again out of step. The population densities from 1950 to 1960 in many urban areas had decreased by as much as 25 per cent. The changes in freight transportation and the improvements in the trucking industry, had reduced the necessity of locating plant sites near terminals or railroads. One-story plant layouts were the decision of those persons whose job it was to come up with new production techniques. The so-called outlying industrial parks sprang up.

The railroads, in order to provide for this growing and changing economy, had to improve. They had to find ways to minimize duplication of service. They had to cut costs and eliminate unprofitable services.

By the late 1960's there was already quite a trend towards the consolidation of railroads. The railroad firms were trying to preserve their profitability, even in the face of increased operating costs and the competition of other types of travel and service.

The B and M's most recent problems began in 1958, according to a report on the firm's pre-bankruptcy history. The people who were at the top of the B and M's management structure in 1958 were accused of misapplication of assets "by reason of the sale of certain equipment." They were later found guilty and were fined and sentenced.

FROM 1958 and for the next 12 years, the B and M suffered "uninterrupted deficits in net income." The average yearly deficits incurred amount-



## Hot box detector

Brooks Cardwell, chief train dispatcher for the B & M RR, checks tape which automatically records overheated axles at various points in the system, giving advance warning of situations which can be corrected. Dispatcher Robert Martin controls a portion of the New England network in background, at Billerica headquarters.

ed to \$3.5 million and at the same time "fixed charges of interest paid during that period consumed its depreciation and caused it to cannibalize its properties." In consequence, its capital expenditures for equipment and maintenance were said to be inadequate. Prior to this time, its last heavy expenditures for equipment were made in 1950. The usual tie-laying and track-replacement programs were neglected.

In addition, the B and M's first mortgage bonds fell due in July, 1960. The firm was unable to refinance them. In fact, the B and M, as explained in its own pre-bankruptcy history, "was considered as teetering on the verge of bankruptcy in 1965," five years before the bankruptcy proceedings got un-

derway. At that point, it became the second of six major railroads in the eastern United States to file for bankruptcy. During the next two years the other four followed suit.

The trustees of the railroad were optimistic that it could be reorganized with what they termed "a comprehensive action program." They stressed the need for abandonments, new capital investment, tax abatements and some subsidies.

At the B and M yards, the firm sold or leased much of the original 600 acres of land. The railroad is now housed in two major buildings including most of the executive offices which at one time were located in Boston.

Also housed in the executive office

building is several console type control panels which is a miniature layout of the tracks maintained by the B and M. Operators on duty 24 hours a day can monitor the movement of any of the company's rolling stock. The electric control panels now do the job once accomplished by the telegraph which started back in 1837 (in the United States it was 1851) and the telephone, which was first tested in 1877.

Other equipment which is monitored by a crew of men under the direction of the chief train dispatcher, Brooks Cardwell of Ipswich, includes a "hot box" detector, which indicates if and when a train axle is overheated.

One of the most recent major expenditures (a multi-million dollar project) by the B and M occurred in 1972, when, according to company officials, it was found necessary to make "some radical changes in our boiler system."

The old system, which in 1913, was the most up to date to that time, was causing a drastic reduction of the company's potential to pump water and supply heat. It was also causing environmental problems.

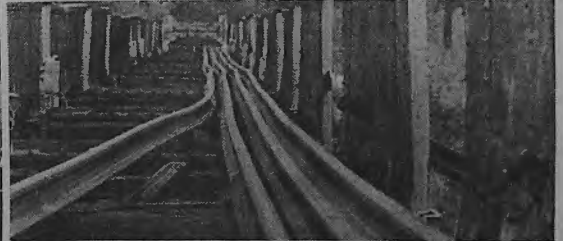
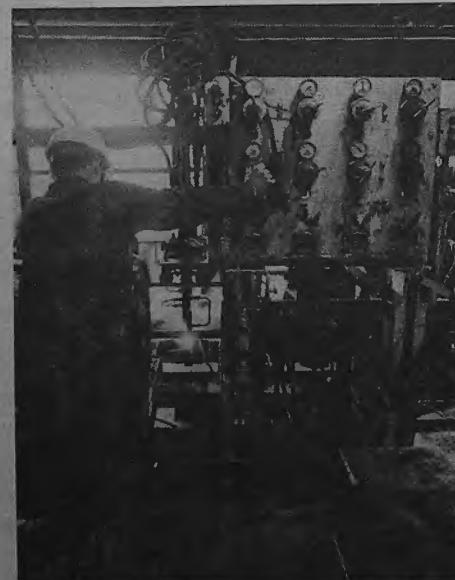
The result is three new 600 horsepower low pressure (15 pound per square inch or less) automatic Clever Brook boilers.

COMPANY OFFICIALS have also recently acquired 12 new locomotives, at a cost of \$250,000 each. In addition, says Mrs. Gloria Stone, who is a company spokesman, the B and M now has 700 new boxcars (she calls them "money-making little devils") which in one month averaged earnings of \$276.88 for each car, or a total monthly income of \$193,816.

(Continue on Page 4)



BOSTON & MAINE ADMINISTRATIVE OFFICES IN OLD CAR SHOPS ... since being relocated from Boston to North Billerica



## Trains can't go anywhere without safe tracks

Phil Corder, welding supervisor, controls a rail-welding apparatus, left, while bottom right, Charlie Clark grinds

weld. Upper right, 30 flatbed cars are used to haul these 1326-foot long welded rails.

# ... and tracks being upgraded

(continued from Page 3)

Another money-maker ("or at least that is the way it is planned") is the establishment of an automobile unloading facility in Ayer.

Another major expenditure is the B and M's continuing track upgrading program. While there have been a large number of reports of train derailments recently, the B and M has taken numerous actions to reduce its high accident rate. The management, working with the trustees has provided for regular safety inspections. Train speeds have been reduced as have the number of cars per train.

In addition, the tracks have been upgraded, observed Mrs. Stone. She noted the latest reports on the number of ties and train rails installed. She referred to the reports for the month of August and compared them with August of 1973. There were 65,200 railroad ties installed in August this year. In 1973, the number was 106,300. The figure on the rails was 70,671 feet as compared with 70,723 feet for the same month in 1973. In August this year she said 227.4 miles of railroad track was surfaced and lined. In August last year it was 126.01 miles. There were also 83,100 tons of ballast (gravel tamped under the ties) dumped in August this year. In 1973 the August figure was 48,000 tons.

Almost anticipating the next question, Mrs. Stone took note of the shortages of materials this year, as compared to last year. Most building contractors are also finding it difficult to come up with some of the materials, especially steel.

The trustees, as a part of their action program, began what they like to refer to as a "sales blitz," which with improved services, is expected to provide a large increase in freight revenue.

Freight service on the B and M pro-

vides only about eight per cent of the company's revenue.

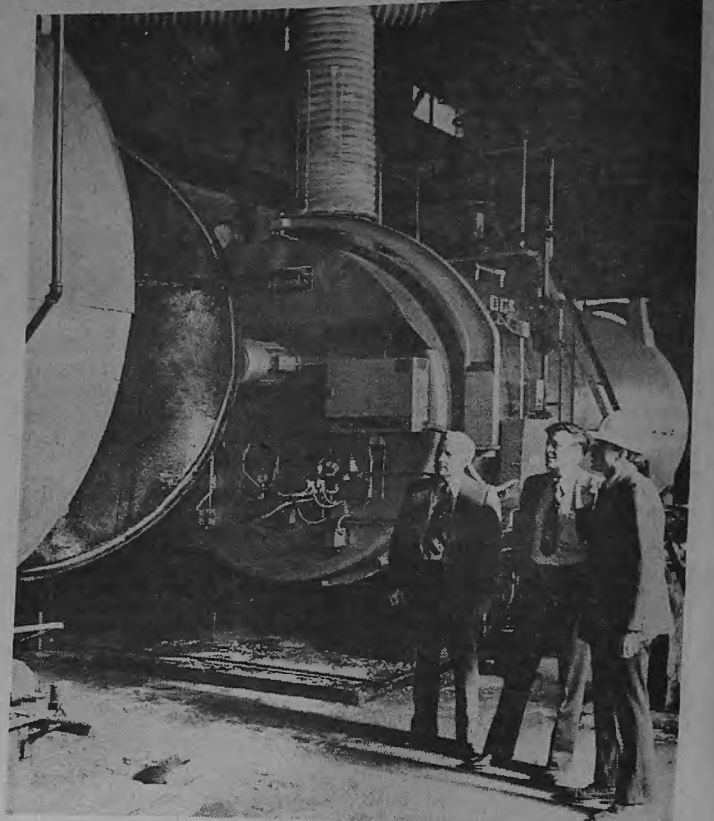
The abandonments, as referred to earlier by the trustees, included some track mileage. The present system, according to Mrs. Stone, operates 603 miles in Massachusetts, 681 in New Hampshire, 46 in Maine, 104 in Vermont, and 63 in New York.

AS ONE OF the principal systems in the northeastern United States, it still provides important connections between New England and the south, the west, and Canada. Listed among its important terminals and other connecting points is Mechanicville and Rotterdam Junction, N.Y., on the west; Portland, Me. on the east; Bellows Falls, White River Junction and Wells River, Vt., plus Woodsville, Groveton and Berlin, N.H. on the north and Worcester and Springfield on the south.

As explained by Mrs. Stone, the B and M provides a fast connecting service from Boston to the Canadian Maritime Province (Quebec and Montreal) and via the Mohawk Trail and Hoosac Tunnel to connections with the Penn Central for service to Chicago and the west.

While coal and potatoes were at one time the major products carried by the B and M, these two items "are now far down on the list," said Mrs. Stone. She then listed the seven items which the company officials say are now in the lead. Heading the list is paper, which is followed in turn by grain, mill products, food products, canned goods, chemicals, lumber and waste.

Once considered one of the greatest material achievements of the industrial era (and many will insist it still is) the railroads, like the B and M, can still offer numerous advantages, especially "over the long haul" and at far below the costs of other modes.



SUN Staff Photo by Hunt

## Looking over new power plant

B & M vice president Wallace H. Chaplin, president Alan G. Dustin and chief engineer Vincent R. Terrill check out three 600-hp low pressure boilers.

## Today's Crossword Puzzle

### HASTY PUDDING

By A. J. Santora

#### ACROSS

- 1 Trotting town
- 7 Not five
- 12 Fishy ant?
- 17 Blush green
- 21 Resist
- 22 Kind of drab
- 23 Reluctant
- 24 Gore Vidal book
- 26 Electronic cue card
- 27 Out of order
- 29 Swiss canton
- 30 Teeners
- 31 Radiates
- 33 Guinness
- 34 Trail
- 36 "— Skylark"
- 37 Reduce drastically
- 38 More barren
- 41 Rarely
- 44 Pinnacle
- 46 Clothing
- 46 Health farm
- 47 Kind of sandal or um
- 48 Particulars, for short
- 50 Skid
- 51 Collar
- 52 — or jacket
- 53 One-time stracker?
- 58 Moved slowly
- 57 Tropical rodent
- 59 Diplomacy
- 60 Kind of mater
- 61 Money of India
- 62 Clues
- 63 Girls, girls, girial
- 64 One of the cardinal sins
- 66 Ran out
- 67 A year — day
- 68 Challenge
- 69 Delay
- 70 Bland
- 71 Kettle and Perkins
- 72 Person at X when needed
- 76 Pearce or Murray
- 79 Planted
- 80 Sea bird
- 81 Eachew
- 82 Enclosure
- 83 Like some flex
- 86 Ducky bird
- 88 Excel
- 89 Filthy money
- 90 Unborn bug
- 91 — ex machine
- 92 Mimer
- 93 In the lot
- 94 Small fish
- 95 Another look, slow motion
- 99 Unit of reluctance
- 100 Rotten
- 101 Packaging
- 102 Jewish holiday
- 103 Laborious
- 105 Calif. fort
- 106 Skirt insert
- 107 Light helmet
- 108 Beetle
- 109 Completely
- 111 Big family
- 112 German country district
- 113 Proposele
- 116 Pinza
- 117 Sheer linen
- 118 Twilight's prelude
- 121 New Deal agency
- 122 Charges by Celica
- 128 Subway system
- 128 Put up
- 129 Wading bird
- 130 Murder: sl.
- 131 Nook
- 132 Record
- 133 Actress Reed
- 134 Dissuade
- 136 Griddle cakes

#### DOWN

- 1 "And the pig — and slowly..."
- 2 Horse or soap
- 3 Share the extra portions?
- 4 Garden tool
- 5 Notice
- 6 Roman emperor
- 7 Piper's son?
- 8 Beginning letter
- 9 Excavations
- 10 Garden glid
- 11 Vagrant
- 12 Girl's name
- 13 Mey, a.g.
- 14 Coasters
- 15 Ordinal ending
- 16 The Globe or the Abbey
- 17 More capable
- 18 Dances
- 19 Coffeemaker
- 20 Cruise ship for doubles
- 26 Go — limb
- 28 Spill the beans
- 32 Swamp
- 35 TV's Ramsey
- 37 Exhausted
- 38 Steam bath
- 39 Epic poem
- 40 Raved
- 42 Elevators
- 43 Surrealist painter
- 44 Risque
- 45 Dazzling reflection
- 47 Evangelist
- 47 Billy
- 48 Saskatchewan capital
- 49 Beardless
- 50 Potato
- 51 Explode
- 54 After part of ship
- 55 Mrs. Bumker
- 56 Ships
- 58 Miss Hagen
- 63 Auto road in Hesse
- 64 Velvet finish
- 65 Ceremony
- 66 Crazy bird
- 68 Crossword direction
- 69 Labor
- 70 — of the moment
- 72 Tilt
- 73 Louven
- 74 Respect
- 75 Shrowd
- 76 Say this name fast!
- 77 Coincides
- 78 Provoke
- 79 Chip off
- 82 Mongrel
- 83 Outcome
- 84 Uno, for one
- 85 Time-limit exams
- 86 Thickheaded
- 87 Stratagem
- 88 Spar
- 89 Kind of cake or hen
- 91 Autobiography of a sort
- 92 Up — (cornered)
- 93 Hemingway teacher
- 96 Fool's time
- 97 Marked 1, 2, 3, etc.
- 98 Grasshopper
- 101 Tinted red, blue, etc.
- 104 Jewish teacher
- 108 Fast-talking
- 107 School honor society
- 108 Truck for icy roads
- 110 Toltec's cousin
- 111 Souvenir for the bus?
- 112 Pretense
- 114 Roadway
- 115 Fills to reptilian
- 117 Mountain lake
- 118 Quarrel
- 119 Important times
- 120 Powder, for short
- 122 The "in" thing
- 123 Black cuckoo
- 124 Trip for the conceted
- 126 Common verb
- 127 Sgt., for example

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Solution to today's crossword puzzle on page 10