

revenue for this year just closed will likely exceed \$38,000,000. The principal item of expenditure still to be made is the interest on savings bank deposits, and this with minor items will, it is thought, amount to about \$5,000,000, which would leave a net surplus of \$1,500,000 for the year's transactions. This was the estimated amount which Hon. Mr. Foster, the Finance Minister, arrived at in his budget speech on the 14th February last. Last year the surplus fell to \$155,977; but it will be recollected that the sugar duties, amounting to \$3,000,000, had been abolished, and it speaks well for the administration of affairs by the present Government.

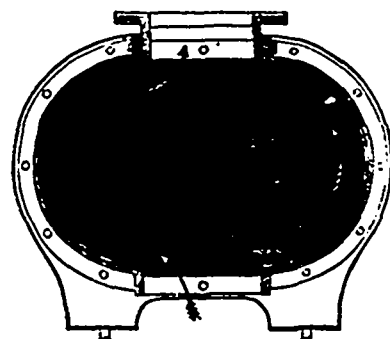
The statements of the two great mercantile agencies for the first six months of 1893 are before the public, and, like their former ones, are widely divergent. Messrs. R. G. Dun & Co. report the failures for Canada and Newfoundland as 811, with liabilities of \$8,705,127, while Bradstreet's reports the number at 887, with total liabilities of \$8,215,759. The former agency reports seventy-six failures less than the latter, but the liabilities of the smaller number reported by it are \$490,368 greater than those of the larger number reported by Bradstreet's. Were the liabilities proportionately less, the conclusion would be that Bradstreet's had more accurate facilities for obtaining information than have R. G. Dun & Co., but such not being the case, all we can do is to wonder how it is that such wide divergencies can possibly exist. Can either of the statements be relied upon? We think not, and it would only be a waste of time to carry the comparison any further. Mercantile agency statistics to be of any use should be reliable. It is clear to us from the foregoing that they are not so. Whatever the cause of their wide divergence, they ought for the sake of decency, if for nothing else, to make some effort to furnish reliable figures, otherwise their usefulness is gone.—The Shareholder.

MR. ROBERT H. LAWDER, who has investigated the subject of trade relations between Canada and the States with much patience and intelligence, makes a pregnant remark in the current issue of *The Week*, in which he says: "Canada feels that in her magnificent canal route, via St. Lawrence to the ocean, she has it in her power to grant or withhold from the United States a privilege of greater value to that country than Canada can derive from a free market for her products in the United States." There is a great truth in this. We have never derived anything like the full benefit from our canals because the whole system was not deep enough. In a few years a uniform depth of fourteen feet will work a revolution in carrying grain from Lake Superior to the Atlantic. The Western States farmer will look upon that route as a priceless boon. It will be a necessity for him, and he will instruct his rulers at Washington to see that every obstacle to its use is removed. With a depth of fourteen feet others besides our farmers and foreigners will benefit, because there must spring up an internal commerce which will enable vessels doing a coasting trade to steam into Toronto harbor. Canadians are justified in looking upon the completion of the canal works, therefore, as a promise of great expansion of trade as well as a potent factor in cheapening the carriage of food products to the markets of Europe.—Cleveland, O., *Marine Record*.

THE *July Wide Awake* has a leading article by George Bradford Bartlett, devoted to a description of Concord Dramatics, or private theatricals in Concord in the days of the "Little Women" and the "Philosophers." Maud R. Burton and Elizabeth Cummings have good Fourth of July stories, and the national element is further recognized by verses by Lillian Crawford True and Mrs. J. T. Greenleaf. Caroline Ticknor's story of "Fantine" is timely and suggestive; Marietta Ambrosi has a description of Carthage, "An Old Spanish Town"; Etta B. Donaldson describes "A Unique Farm in Africa," (for the raising of ostriches), and J. P. H. Gastrell tells of "Electric Tricks." Jeannette A. Grant furnishes a delightful account of that portion of the Scottish highlands which some readers have traveled in fancy "With the Lady of the Lake." The *Wide Awake* Athletics article is by John Graham, and is devoted to "Out-of-door Gymnastics." 20 cents a number. At the news stands, or direct from the publishers, D. Lothrop Company, Boston.

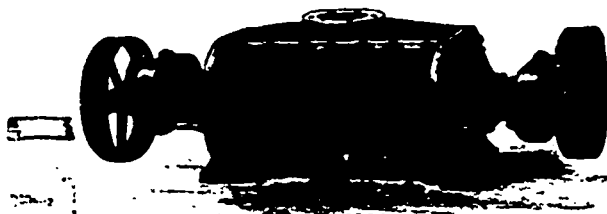
### ROOT'S POSITIVE BLOWER.

By examining the accompanying illustrations it will be noticed that the Root's positive blower is simple, durable and efficient. The case of the blower is made entirely of iron, steel and bronze, all parts of which are either turned, planed, or faced to fit each other with perfect accuracy without any packing. The cylindrical parts are bored out with the same accuracy as the cylinders of a steam engine. The gears are cut on gear cutting machines of the most modern construction and enclosed in oil tight housing and run constantly in oil, so that the friction and wear are reduced to the minimum and the durability increased in the like ratio.



As the Blower is positive in its action, displacing its entire contents of air each revolution, it is evident, if the outlet is closed, the machine must stop. It is therefore necessary for smith-shops and other purposes where a variable blast is required, that an escape valve should be placed on the Blower so that when a part, or all of the blast is shut off from the fires, the surplus air can escape at the valve, a uniform pressure being thus attained. For foundries and similar purposes, where a uniform blast is used, the valve is not needed and is not put on the blower.

The Root's blower does not operate on the principle of a fan, that is, by imparting momentum to the air by running at a great velocity, but by a regular displacement of the air at each revolution, whether it runs fast or slow. When the air enters the case at the opening for induction, and is closed in by the wings of the revolvers (see cut) it is absolutely confined and positively forced forward until brought to the eduction pipe, when it must be discharged or the machine stops.



The internal operating parts consist of only two revolvers, each of which is operative.

The external parts consist of the case, four journals and journal-boxes, four cut gears, and oil tight housing and two driving pulleys.

Owing to its simplicity, fewness of parts, slow speed, its being perfectly balanced, good mechanical construction, and their being no internal friction or wear this blower does its work with fifty per cent. less power than required to drive a fan.

The Root's positive blower is now used for numerous purposes and any one now interested in those machines can get full particulars from The Hamilton Facing Mill Co., Hamilton, Ont., who are sole agents for Canada.