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portance of the work justified the attention which has been generally adopted for the educating of the men, it is, however, safe to assert that no other individual class have been given the same privileges and opportunities of acquiring technical education regarding their vocation as the locomotive enginemen of this country, and it is pleasing to note that the advantages given are being embraced by the men generally.

Although accelerated speed and long trains are now the common practice on all our great railway systems, in both passenger and freight train service, the modern type of locomotives with ample steam producing qualities, and the universal application of the air-brake equipment renders the practice an accomplished success, as is very evident by the degree of regularity with which trains are handled from day to day on all the railway systems. Notwithstanding the fact that the locomotives have become larger and a great amount of additional appliances have been added to the same, the conditions prevailing during recent years render the vocation of the engineers very much less arduous, and the work is is attended with a greater degree of safety than was the experience in former years prior to the inception of the modern safety methods and appliances, and in other respects the engineer of the modern locomotive has the advantage, as the machinery and parts of the early locomotives were, on account of weakness, susceptible to frequent failure, and were a source of constant trouble and risk to the engineers. Breakages of side rods, crank pins, wheels, axles, eccentric straps, etc., made up the daily list of casualties; but, in the modern engines these parts have all been strengthened or improved, so that failures of that description have almost disappeared, removing a difficulty experienced by their predecessors on account of these failures. Double tracking of lines, block signalling systems and other modern improvements have also contributed to lessen the immunity from accident, and to relieve the care and responsibility of the engineers to a large extent. Good judgment is, however, one of the most essential characteristics required by the engineers placed in charge of a locomotive engaged in modern train service to obtain the best possible results in handling the train safely: the economical use of fuel and other supplies and close attention to the condition of the locomotive. Good judgment must be exercised when handling long freight trains so as to prevent damage to the draw gear, etc. Economical fuel consumption is a ques tion to which the engineers should devote par ticular attention, as a small percentage of saving by each individual engineer will effect good results, when it is considered that the coal consumed by the locomotives on the Canadian railways last year cost nearly \$7,000,000.

The motive power department of all rail

ways must necessarily remain the great money-spending department, and by good locomotive management it locomotive management the engineers effect substantial savings and reduce the working expense in many directions. It ap pears to be the generally recognized practice that the engineers should graduate from the ranks of the firemen; therefore, it is absented lutely essential that care be taken in making the selection of the men entering the service as firemen, who are to be trained to manage the locomotives in the future. Their education should be conducted along the same channels as is now the practice to enable them to render the companies the best por sible service. The adoption of the larger size locomotives for a time deterred a desir able class of men from entering the service as it was then considered necessary 10 the some kind of a physical giant to handle the coal consumed by one of our modern locomo