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This is a Case 5 feet long, 3 feet wide and 5 inches deep, with a hinged exhibiting, and affording free access to some 200 well-finished Hardwood M form, each of which being neatly attached to the board, by means of a wire-p Student or Professor.

The use of the Tableau and accompanying Treatise, reduces the whole seience and art of Mensuration from the study of a year to that of a day or two, and so sim. plifies the stndy and teachiig of Solid Geometry, the Nomenclature of Geometrical and other forms, the development of surfaces, geometrical projection and perspective, plane and curved areas and Spherical Geometry, and Trigonometry, and mensuration of surfaces and solids, that the several branches hereinbefore mentioned may now be taught even in the most elementary schools, and in convents, where such study could not even have been dreamed of heretofore.

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# LECTURE BY MR 

(Extract from the "Quebec Daily Me

Mr. Baillarge's lecture, on Wednesday evening last, before the Literary and Historical Society of Quebec, proved once more how very interesting, even in a popular sense, an otherwise dry and abstruse subjeet, may become, when ably handled.

The lecture showed the relationship of geometry to all the industries of life. He traced its origin firom remote antiquity, its gradual developpment up to the present time. He showed how it is the basis of all our public works, and how we are indebted to it for all the constructive arts; its relationship to mechanies, hydratilics, opties, and all the physical seiences. The fairer portion of mankind, said Mr. B., have the keenest, most appreciative pereeption of its advantages and beauties, as evidenced in the ever-varying combinations so cmningly devised in their designs for needle tracery, laces and embroidery. He showed its relationship to chemistry in crystallization and polarization ; to botany and zoology in the laws of morphology ; to theology, and so on. In treating of the circle and other conic sections, he drew quite a poetical comparison between the engineer who traces out his curves among the woods and waters of the earth, and the astronomer who sweeps out his mighty circuits amidst the starry forests of the heavens. The parabola was fully illustrated in its application to the throwing of projectiles of war, also as evidenced in jets of water, the speaking trumpet, the minror and the reflector, which, in light-houses, gathers the rays of light, as it were, into a bundle, and sends them off together on their erraud of humanity. In treating of the ellipse, this almost magic curve which is traced out in the heavens by every planet that revolves about the sun, by every satellite about its primary, he alluded to that most beautiful of all ovals-the fice of lovely woman. He showed how the re-appearance of a comet may now be predicted even to the very day it heaves in sight, and though it has been absent for a century, and how in former ages, when these phenomena were unpredicted, they burst upon the world in unexpected moments, carrying terror everywhere and giving rise to the utmost anxiety and constemation, as if the end of all things were at hand. In a word, Mr. Baillargé went over the whole field of geometry and mensuration, both plane and sperical ; a difficult feat within the limits of a single lecture; and kept the andience, so to say, entranced with interest for two whole hours, which the president, Dr. Anderson, remarked were to him as but one; and no doubt it must have been so to others, since Mr. Wilkie, in seconding the vote of thanks proposed by Capt. Ashe, alluded to the pleasure with which he had listened to the lecture as it, he said, it were like poetry to him, instead of the unpromising matter foreshadowed in the title. Mr. Baillargé next explained in detail his stereometrical tableau, which we hope to see soon iutroduced into all the schools of this Dominion. He showed how conducive it will be in shortening the time heretofore devoted to the study of solids and even to that of plane and convex supericies, spherical
trigonometry, geometrical projee wing, the developuent of suifia dows, and the like. Mr. Wilkie, had been atforded him of pros corroborated Mr. B.'s statement immense saving in time, where blems which generally required h can now (if the rule be, as Mr. generally applicable, and, as has many persons in testimonials on tures,) with the help of the new 1 be performed in as many minutes the use the models are in imp: knowledge of their nomenclatur hequaintanceship with their varie He showed how, to the architec builder and mechanie, the mode the forms and relative proportion lomes, piers and quays, cistems drons, vats, casks, tubs and othen eathworks of all kinds, comprisin cuttings and cmbankments, the s: Roman columm, square and want the camping tent, the square or s toor or window, nich or loophole or arched ceiling of a chureh on the cannon ball, or, on a larger se sun and planets. Mr. Baillargé received an order for a tablean Education of New hrunswick, wi Aucing it into all the schools of Mr. Vannier, in writing to Mr. Ba on the 10th of January last, to granting of his letters-patent for that Messis. Humbert \& Noé, the tary of the society for the general in France, have intimated thei next general meeting, of having tion conferred on him for the ben tion and discovery are likely to Mr. Giard, in writing to Mr. Baill the Hon. Mr. Chauvean, Minister fay: "Il se fera un devoir d'en ) 6i tion dans toutes les maisons "toutes les écoles." From the University, Mr. Maingui writes "plus on approfondit cette for corps, plus on est enchanté (tl de sa simplicité, de sa clarté et généralité." Rev. Mr. McQuan "delighted to see the old a superseded by a formula so si
Newton, of Yale College, United
" the tableau a must useful arran
" the variety and extent of the "formula." The College l'Asso "Mr. Baillairgés system as pa " instruction." Mr. Wilkio has that " the rule is precise and sim "shorten the processes of calcule

# MR. BAILLAIRGE. 

, geometrical projection, perspective dravelopment of surfices, shades and shalike. Mr, Wilkic, so fur as opportunity orded him of prosing the calculations, Mr. B.'s statement in relation to the ing in time, where many abstruse progenerally required hours on days to solve. ie mule be, as Mr. Bailargé asserts, so dicable, and, as hats then certitied be so in testimonials over their own sigmahe help of the new fommala and tablean, in as many minutes; to say notling of models are in imparting at a glance a their nomenclature or names, and an ship with their varied shapes and firmues. ow, to the architect and engineer, the nechanie, the models are sugrestive of relative proportions of buildings, roofs, and quays, cisterns and reservois, caiulasks, tuibs and other vessels of capacity, all kinds, comprising railroad and other embankments, the shaft of the Greek and in, square and wancy timber, saw-logs, tent, the square or splayed opening of a ow, nich or loophole in a wall, the vanlt iling of a church or hall, the billiard or all, or, on a layrer scale, the moon, earth, nets. Mr. Baillargé, we may add, has rder for a tablemi firon the Minister of New Brunswick, with the view of introall the schools of that Province; and in writing to Mr. Baillairgé, from France, of Jamnary last, to advise him of the is letters-patent for that country, says Immbert \& Noe, the President and seereciety for the gencralization of education we intimated their intention, at their meeting, of hiving some mark of distincIon him for the benetit which his invenvery are likely to confer on education. writing to Mr. Baillairgé, on the partt of Chau vean, Minister of Public Instruction, erat un devoir d'en recommander l'adopoutes les maisons d'éducation et dans coles.". From the Seminary aud Laval Ir. Maingui writes: "Plus on étudie, profondit cette formule du cubage des on est enchanté (the more one marvels) cité, de sa clarté et surtout de sa grande

Rev. Mr. MeQuarries, B. A. "sihall be o see the old and tedious processes by a formula so simple and so exact." le College, United States: "considers a must useful arrangement for showing and extent of the applications of the The College l'Assomption " will adopt ge's system as part of their course of

Mr. Wilkic hats written to the author is precise and simple, and will greatly processes of calculation. The tableau,"
says this competent juuler, "comprising as it does a "great variety of elementary models, will serve "admirably to educate the eye, and must greatly, "facilitate the study of solid mensuration." "Again," says Mr. Wilkie, "the Goverment would confer a "boon on schools of the middle and higher class by "affording access to so suggestive n collection." There are others who, irrespective of considerations as to the comparative accuacy of the formula, or of its advantages, as applied to mere mensuration, are awake to the fact that the models are so much more suggestive to the pupil and the teacher than their mere representation on a blackbord or on paper, and who, in their written opinions, have alluded especially to this feature of the proposed system. M. Joly President of the Quebec Brancin of the Montreal School of Arts and Design, in a letter on the sulbject to Mr. Weaver, the President of the Board, and after having himself witnessed its advantages on more than one occasion, says, in his expressive style, "the difference is enormons." Professor Tonssaint, of the Normal School, Dufresne, of the Montmagny Academy, Boivin, of St. Hyacinthe, and many others, are of the same opinion ; among them MM. R. S. M. Bouchette, O'Farrell, Fletcher, St. Aubin, Steckel, Juncan, Venner, Gallagher, Lafrance, and the late Brother Anthony, \&c., \&c. Neither will it be forgotten that the professors of the Laval University, after reading the enunciation of Mr. B.'s formula, as given in his treatise of 1866, expressed themselves thus: "Un doute involontaire s'empare " d'abord de l'esprit, lorsqu'on lit le No. 1521; mais " un examen attentif des paragraphes suivants, dissipe " bientôt ce doute et l'on reste étonné a la vue d'une "formule, si elaire, si aisée ì retenir et dont l'appli"cation est si générale." Mr. Fletcher, of the Crown Lands Department, says: "I have compared, in the " case of several solids, the results obtained by your " mode of computation with those resulting from the "ordinary and more lengthy processes, and congra" tulate you sincerely on your enunciation of a formula "so brief and simple in its character, and so precise "and satisfactory in its results." Mr. Baillairgé also took occasion during his lecture to allude, in other relations, to his treatise on geometry and mensuration, in which he showed he has introluced many important modifications in the usual mode of treating the subject of plane and spherical geometry and trigonometry. In conclusion, we must add that the Council of Public Instruction, at its last meeting, appointed a Committee, composed of the Lord Bishop of Quebec, and of Bishops Langevin and Larocque, to report to the Council at its next general meeting in June, and who, it may be taken for granted, after the many flattering testimonials in relation to the utility and many advantages of the stereometrical tableau for purposes of education, cannot but recommend and direct its adoption in all the schools of the Dominion.
We learn with pleasure that Mr. Baillargé has been invited to repeat this lecture in Montreal.

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