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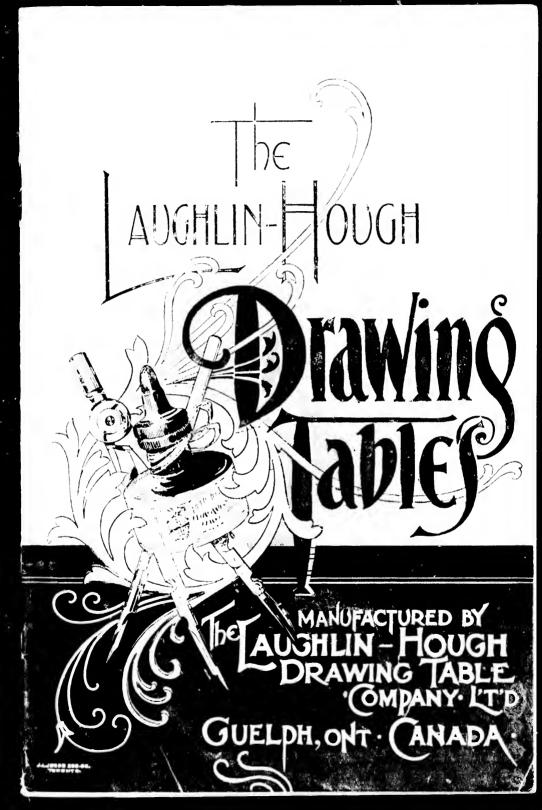
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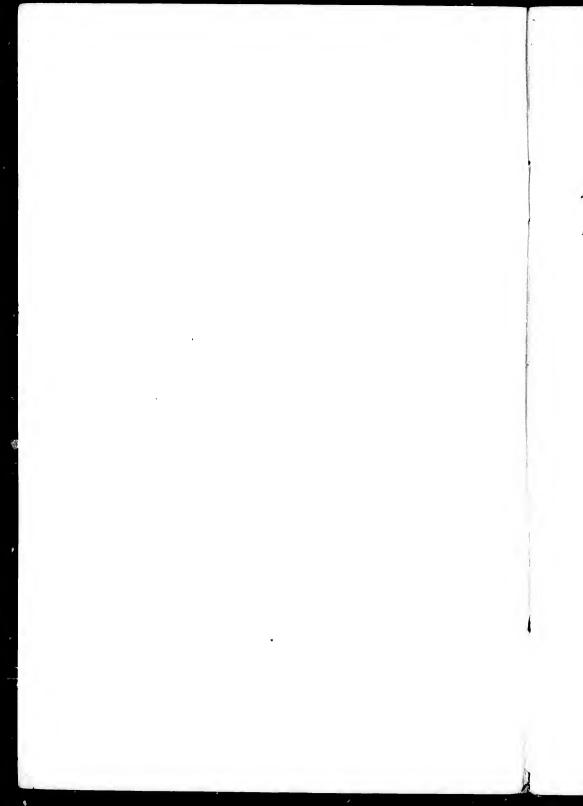
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MANUFACTURERS OF

The Laughlin-Hough Mathematical Drawing, Sketching and Designing

# Tables and Blackboards

AND ALL KINDS OF



Architects' Draughtsmen's Engineers' and School Supplies

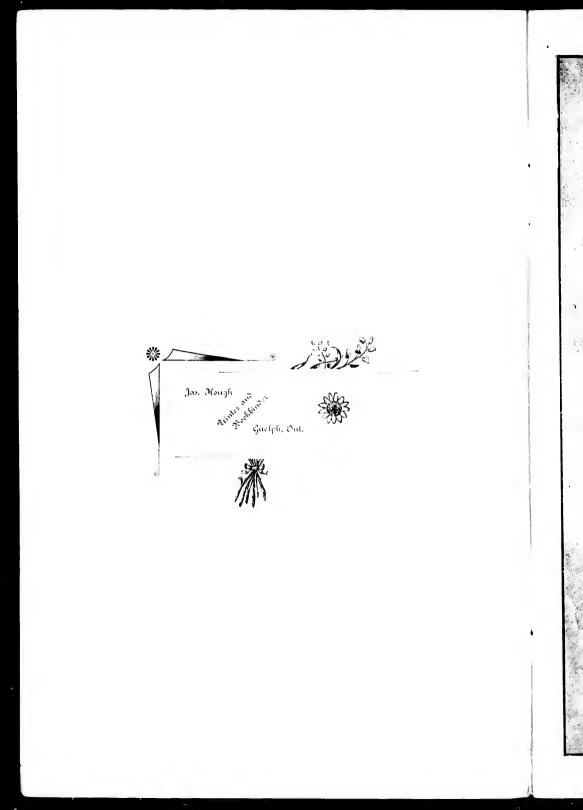
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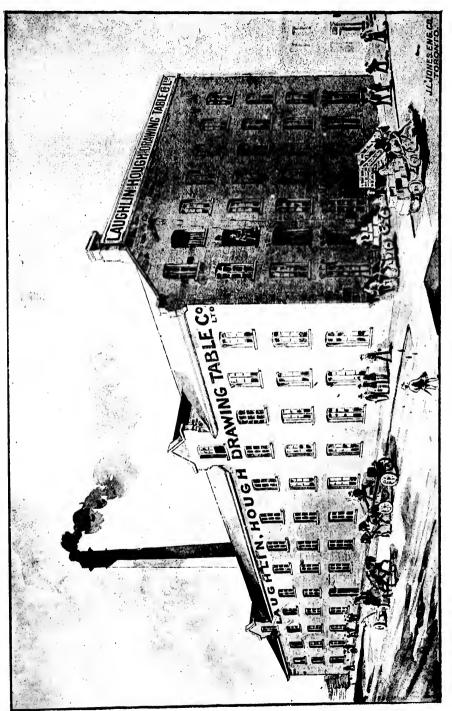
Head Office and Factory:

#### Guelph, Ontario, Canada.

Branches:

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VIEW OF FACTOR<sup>1</sup>ES AT GUELPH, ONT

Introduction

HE 19th Century has been aptly defined as the Scientific Age. It may well be termed the Inventor's Age, for the crystallized evidence of the inventor's dreams are all around us and he who runs may read. So rapidly have we moved along the ve of progress during the past ten decades, that the luxuries of one decade become necessities in the next. The wonder of one generation is an every-day matter to the people of a succeeding generation. Telegraphy, the steam engine. the sewing machine, the loom,

agricultural implements, the telephone, the phonograph, the bicycle, and the varied wonders engendered by modern discoveries in electrical science are convincing proots of the truth that lies in such a statement. Highly developed and complex machinery is rapidly bearing us on to the millennium of manufactures. The modern love of ease and comfort refuses to tolerate the slow.

cumbrous movements, and imperfect productions of a bye-gone day. To day must seek a further goal than that of yesterday. Men and matter have to move rapidly now a days or be pressed to the wall and left in the lurch by more progressive rivals. To merely walk in yesterday's track is to retrograde. "Advance, advance" is the watchword of to day, with all who expect to keep up with the procession in the modern march of progress.

The world has only time and inclination to judge by material results. In its estimation the inventor always stands in one of two positions. If successful, he is a genius, if unsuccessful he is only another in the great army of dreamers. To reach success in this connection he has obviously the better chance who recognizes the want of some special production and sets to work with all his available resources of brain, sinew, pluck and capital to supply such a demand in its cheapest and most highly perfected form. In this connection none have secured a higher degree of merit than the inventors whose productions we shall attempt to illustrate and describe in the following pages.

Hitherto, the art of drawing has been universally practised by the use of primitive T Squares, Angle Squares, Protractors, Parallel Rules, Dividers, and Sectors. Men began to draw thus as if from a common inspiration. Doubtless many have objected to such primitive conditions and methods, but such have never succeeded in passing the objective point. This art of drawing is one of the few that has been preserved down through the ages until this generation in its original entirety. Until to-day Objection had never merged in Improvement. Such objections were, doubtless, informaliv entered, when the draughtsman was called upon to execute, with mathematical precision, some architectural or geometrical drawing. Doubtless, too, the language of such an one was characterized more by earnestness of diction than devoutness as he surveyed the crude implements by which his capable hands were so manifestly handicapped. Such an objector might readily recognize these Imperfections and was, without doubt, an honest, capable and outspoken critic. But mere criticism, whilst it is an adept at pulling to pieces, is not creative-lconoclasm is easier and cheaper work than building. Discovery has dawned at last, however, and the first rays of its light have fallen on the inventors of The Laughlin-Hough Drawing Table Company.

This Laughlin-Hough Table does not appear before the public without proper and highly satisfactory letters of introduction. It comes to us highly endorsed, for it has been examined and commented upon by some of the world's best scientists and experts who unanimously pronounce it to be simple, practical, rapid, absolutely accurate, and one that is readily understood by the student as well as the professor. These men are confident that it is destined to revolutionize the whole art of Mechanical, Architectural and Geometrical Drawing.

This Invention has been patented in all civilized countries. Each Table and Board is intended for actual service and is not presented as an experiment. These Tables and Boards possess features of a distinctive character which add greatly to their intrinsic value. Practical men in the profession cannot afford to over look them, possessing, as they do, merits of such a positive character, simplifying the work done, and the rapid and accurate manner in which that work can be accomplished makes them a necessity in every Draughting Room.

We ask the reader of these introductory remarks to look carefully through the appended catalogue, and give it that consideration which is due to an invention that has received the hearty endorsation of honest exper's and able scientists.

The Laughlin-Hough Drawing Table Co., Ltd.

# Description

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HE Laughlin-Hough Drawing Tables are constructed strictly upon mathematical and scientific principles and the object of the invention is to provide a means whereby Draughtsmen, Architects, Railroad and Civil Engineers, Artists, Designers, Wood Engravers, Students, &c., are enabled to accurately and rapidly make any desired class of drawing without the use of

••• T Squares, Angle Squares, Protractors, Parallel Rule. Dividers or Sectors without change of position of arms or body, the open for working continuously in the most comfortable attitude.

The Drawing Board which receives the paper is constructed in such a manner that it revolves on its centre and is assisted in its rotary motion by friction rollers in frame underneath. The inner edge of outer frame in which the board revolves, is provided with a stationary protractor.

made of celluloid, graduated from zero (0) in centre to 90 degrees right and left, and as a consequence any desired angle can be obtained instantaneously. It will thus be readily seen that with the protractor located around the outside edge of the board that carries the drawing, a much more accurate degree of angle can be obtained than by the old method of using a small protractor on the drawing.

The Tables can be lowered or raised to any desired height or pitch of angle, enabling the operator to sit or stand at pleasure, thus avoiding the cramped and awkward positions which are a necessity in the use of the ordinary drawing table.

One of the main features of this valuable Drawing Table is the traveiling horizontai ruler. which is counter-balanced and is freely moveable, but will remain perfectly steady at any point where it may be placed, thus dispensing with the cld-fashioned T squares. The ruler being adjustable, is always mathematically correct, and by the use of the vertical graduated rule at the outer edge all measurements are obtained instantaneously either at positive right angles or sections of angles. All wearing parts are adjustable and easy of access, all errors, imaginary lines, and use of erasing rubber are avoided, the old method of calculating is entirely done away with; all work is finished at one operation being ready for the tracer, blue print, or the work shop. The old system of securing the paper, by tacks, is dispensed with, the method adopted is to place the paper on the revolving table and is secured with spring clips, thus making it very convenient and holding the paper perfectly tau upon the board.

Ail lines are drawn horizontally and from left to right without change of position of the draughtsman no matter at what angle it is desired the lines shall appear upon the paper, and among other advantages thus accruing the light as a consequence always fails in a uniform and favorable manner upon the work.

They effect a great saving of time in the execution of all architectural and mechanical drawings. It has been calculated that on a fair average at least three-quarters of the time usually occupied on a drawing is saved by the use of these tables, and in many instances this proportion will be greatly exceeded. By diminishing the number of instruments employed they conduce to greater accuracy and lessen the chance of making errors. They enable the draughtsman to produce more exact and better work, drawings made thereby cannot be otherwise than mathematically correct. The tables, though ingeniously conceived, are yet in all respects simple and free from all that is cumbersome.

They are not only useful in the highest degree, but very ornamental to any office, the table in itself being really a work of art constructed of the very best material throughout, elegant in design, beautiful in finish and durable.

We cordially invite correspondence and will gladly furnish any information desired.

#### STYLE A

DRAWING

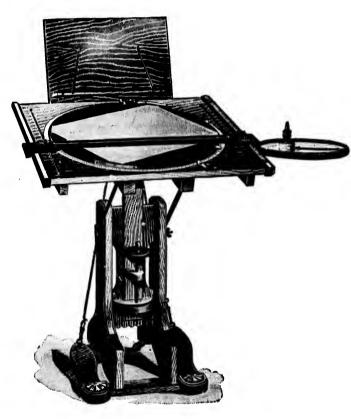
GHLIN HOUGH

## Draughtsmen's Pedal Designing Table

#### DESCRIPTION

THE cut on opposite page represents our Pedal Designing Table, Intended for sketching and designing, and is specially adapted for drawings for patent office, and for laying out and designing by architects and others. The Drawing Board is operated by pedal, upon which the feet rests, leaving the hands free to work. By the circular motion of the table by the use of the pedais the table stops at zero with one foot or 90° with the other, thus producing a mathematical right angle at once. It is made of solid oak, rose' wood or mahogany tinish, side rule scale, celluloid protractor, sliding rule on straight-edge, paper fasteners, adjustable 90° stops, copy holder, tool tray, and other improvements covered by patent. This will be found a very convenient table for general use. Size of paper, 16 x 13 and smaller. ole, ted ing by rk. ble g a ose" ing ору `his per,

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# Style A

Draughtsmen's Pedal Designing Table

## STYLE B

DRAWING TABLE

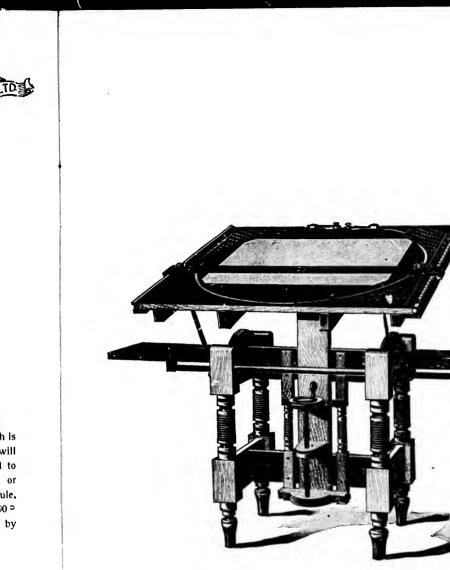
GHLIN HOUGH

#### Single Table

#### DESCRIPTION

**T**HE cut on opposite page represents our Single Table, which is intended for architects and mechanical engineers. It will take a sheet of paper 26 x 20 and smaller, and can be adjusted to any height or position. It is made of solid oak, rosewood or mahogany finish, side rule scale, cellu'old protractor, sliding rule, counter-balanced straight-edge, paper fasteners, adjustable 90 ° stops, two swinging tool trays, and other improvements covered by patent.

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## STYLE K

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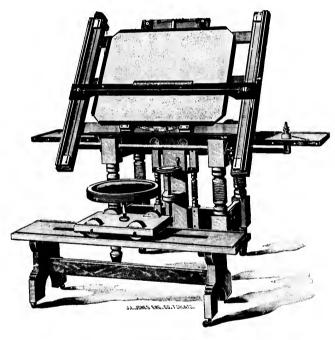
DRAWING

GHLIN HOUGH

#### Draughtsmen's Table

#### DESCRIPTION

**T**HIS is a special Table, with square top, possessing special features. It will take on a sheet of Elephant paper,  $26 \times 20$  and smaller. As in all our other styles, the Drawing Board proper can be instantly removed and replaced by another, and will always set on again true to the straight-edge. It can be set to any angle and all parts are adjustable. It is made of solid oak, rosewood or mahogany finish, side rule scale, celluloid protractor, sliding rule, counter-balanced straight-edge, paper fasteners, adjustable  $90^{\circ}$  stops, two swinging tool trays, and other improvements. A very valuable table.



## STYLE K

Draughtsmen's Table

special 26 x 20 proper ilways angle bod or g rule, stops, valu-

TOF

#### STYLE H

DRAWING

CHLIN HOUGH

#### Draughtsmen's Double Elephant Table

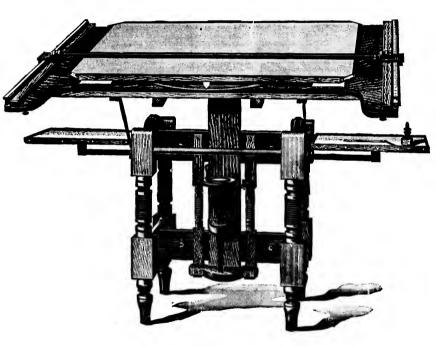
#### DESCRIPTION

**T**HIS is a special Table, with special features, and Is the same in every respect as our Style K Table only that it takes on a much larger paper. It will take on a sheet of Double Elephant paper,  $26 \times 40$  or smaller. As in all our other styles, the Drawing Board proper can be instantly removed and replaced by another, and will always set on again true to the straight edge or ruler. It can be set to any angle and all parts are adjustable. It is made of solid oak, rosewood or mahogany finlsh, side rule scale, celluloid protractor, sliding rule, counter-balanced straight-edge, paper fasteners, adjustable  $90^{\circ}$  stops, two swinging tool trays, and other improvements. This table is already being used most extensively by architect's and draughtsmen throughout the Dominion.





same son a paper, Board d will be set d oak, ractor, adjustments. 's and



# Style H

Draughtsmen's Double Elephant Table

## STYLE C

DRAWING

UCHLIN HOUGH

#### **Double Table**

#### DESCRIPTION

**T**HE cut on opposite page represents our Double Table, and is exactly the same in every particular as Style B, except that it is double instead of single. It enables a draughtsman and his assistant to work together. It has a cabinet in the centre between the tables, with drop door to lock all drawers at once. The drawers are fitted with movable tool trays, plush lined, and can be lifted out or in as desired. Each table is fitted with all attachments, &c., same as Style B. Made in solid oak, rosewood or mahogany finlsh.



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a Southernal in wi Style C Double Table 111 A PARTICIPATION OF ME 11.9 199 11-4 station f

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## STYLE M

DRAWING

GHLIN HOUGH

## Architect's and Engineer's Double Table With Styles H and B Tops

#### DESCRIPTION

THIS Table embodies a Double Elephant Top as shown in Style H, and a Single Top as shown in Style B. It illustrates the fact that all our tops are interchangeable; simply by drawing a pin any top can be lifted off and placed on any other table, except Style A. This Style has all the improvements as enumerated under Styles B and H., made of solid oak, rosewood or mahogany finish. Illustration shows drop door open exposing drawers.

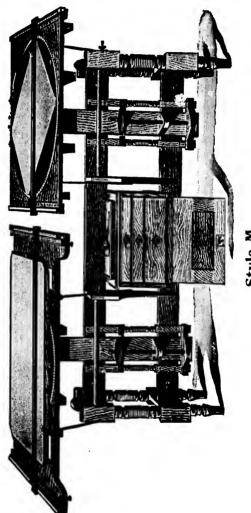
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-17--

Style M

Architect's and Engineer's Double Table With Styles H and B Tops

## STYLE D

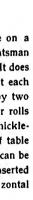
RAWING

CHLIN HOUGH

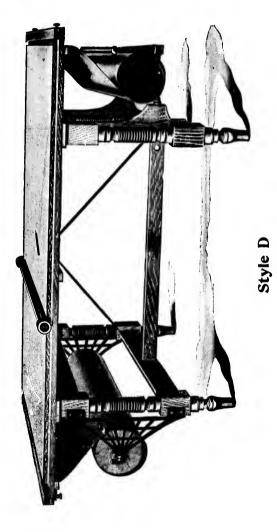
#### **Detail Table**

#### DESCRIPTION

**T**HIS Table is intended for Detail work. It will take on a roll of paper 42 inches wide, and enables the draughtsman to make a drawing the whole length of t<sup>i</sup> roll if necessary. It does entirely away with tacks. The paper passes through slots at each end of the table and is held firm by a bar pressing against it by two thumb screws. The roll is placed on one end and the paper rolls into a basket bracket at the other. The straight edge, with nickle-plated steel scale attached, travels perfectly true from one end of table to the other, and is adjustable. Horizontal or vertical lines can be drawn instantly to any length. A nickle-plated steel scale is linested along the full length of the table, making it convenient for horizontal or vertical measurements. It is a great time and labor saver.



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# **Draughtsmen's Detail Table**

## STYLE F

RAWING

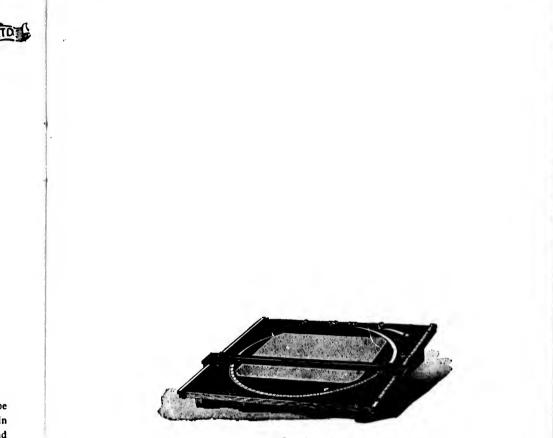
CHLIN HOUGH

## Mechanic's Table

#### DESCRIPTION

THIS Table is designed for Mechanics, and is adapted to be placed on any table or convenient place, and is the same in style and size as Style A, but without the pedal attachment and stand. It is made of oak, and has all attachments, and is very convenient for portability.

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Mechanic's Table

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## **STYLE G**

DRAWING

AUGHLIN HOUGH

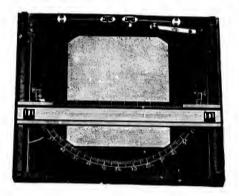
#### School Drawing Board

#### DESCRIPTION

**T**HIS is adapted for children and students. It is operated in exactly the same manner as our more expensive styles, and enables a student to learn more about drawing ln a few hours than can be done by any other way in morths. The board is faced with a slating, and provided with clips for holding paper,  $11 \times 9$  or smaller, so that either a slate or paper drawing can be made. It is well constructed, has a slide rule, side rule and protractor, and is well finished.



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# Style G

School Drawing Board

## STYLE E

ICHLIN HOUGH

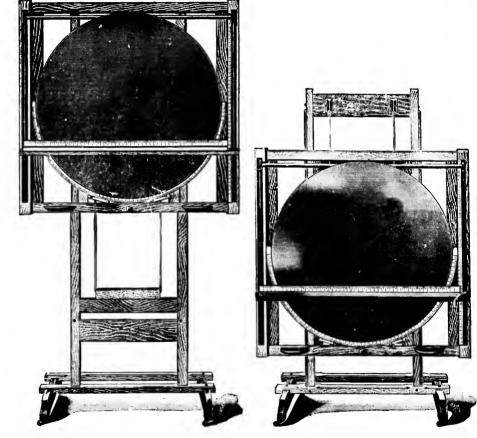
## School Blackboard

#### DESCRIPTION

THIS is our School Blackboard, 3 feet 6 inches in diameter, constructed on the same principle as our tables, mathematically correct, and is the grandest instrument ever constructed for the education of the young in mathematical and geometrical drawing. It can be run down to the floor or up to the ceiling at will. It has side scale, adjustable straight-edge, protractor, angle indicator, and is well made and finished, and has a good-blackboard surface. Apart from drawing this board can be used for other ordinary school purposes.

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Style E

School Blackboard

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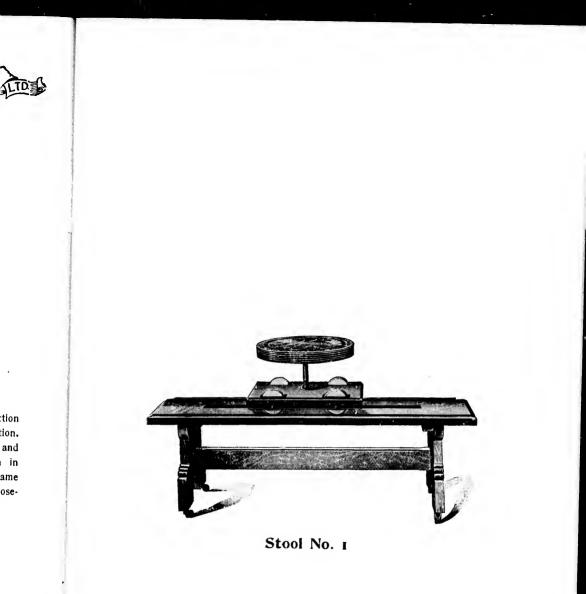
#### STOOL No. 1.

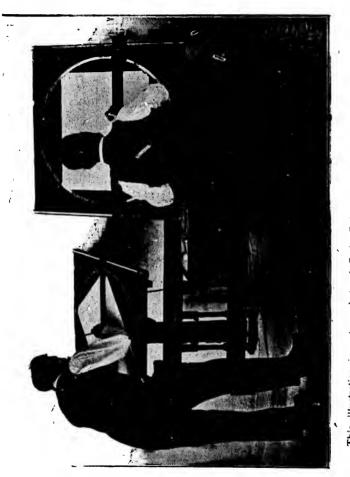
DAWING

GHLIN HOUGH

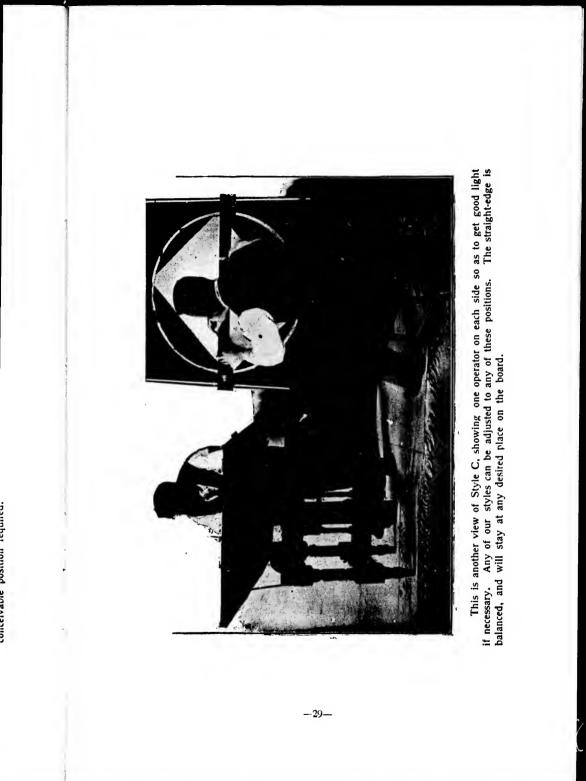
THIS patent sliding seat combines simplicity of construction with great range of adjustability and firmness in position. The range of adjustment is from 17 to 24 inches for height and horizontally the full length of the seat. The seat, when in travel, Is revolving so that the operator is always In the same uniform position before his work. Made of solid oak, and rosewood or mahogany finish.

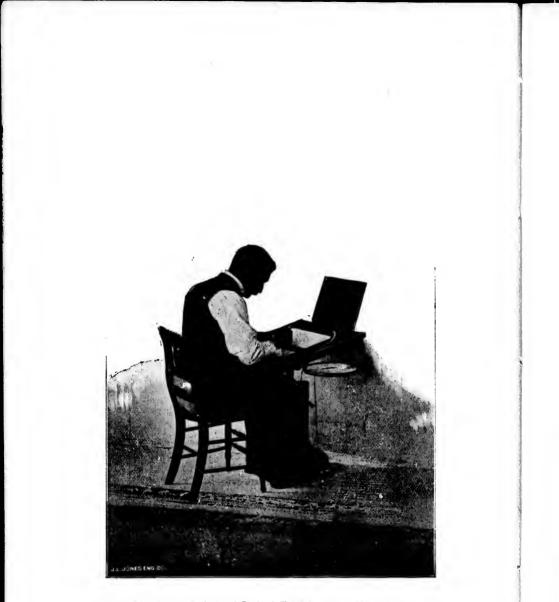
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It shows the table aljusted to It can be put in a most any different positions, one operator sitting the other standing. This illustration is a true photo of Style C in use. conceivable position required.





This illustration is a true photo of Style A Table in use. The operator sits in an easy position, and all lines are made by simply drawing the pencil from left to right.



This is a true photo of the Mechanic's Table in use, set upon an ordinary table.

#### NOTICE

DRAWING

GHLIN HOUGH

Correspondents should be careful to give their names and addresses plainly and in full.

Unless otherwise arranged all prices quoted are for goods boxed and free on board cars at Gueiph.

State plainly in each order the Style and kind of finish wanted.

Customers are requested to communicate with the Head Office at Guelph for prices and terms.

Shipping directions should accompany each order. If no directions are given we shall ship by route considered safest and most expeditious. Our responsibility ceases, however, when goods are delivered to transportation companies and so receipted for by them. If all goods invoiced to you are not received, give receipt to the Railway Company for **just what you get** and advise us **at once** what goods are not delivered, so that we can trace them.

