

# Hamilton optical furniture. Catalogue No. 3

[s.l.]: [s.n.], [s.d.]

https://digital.library.wisc.edu/1711.dl/ITTQ6JEOQXJAF8N

This material may be protected by copyright law (Title 17, US Code).

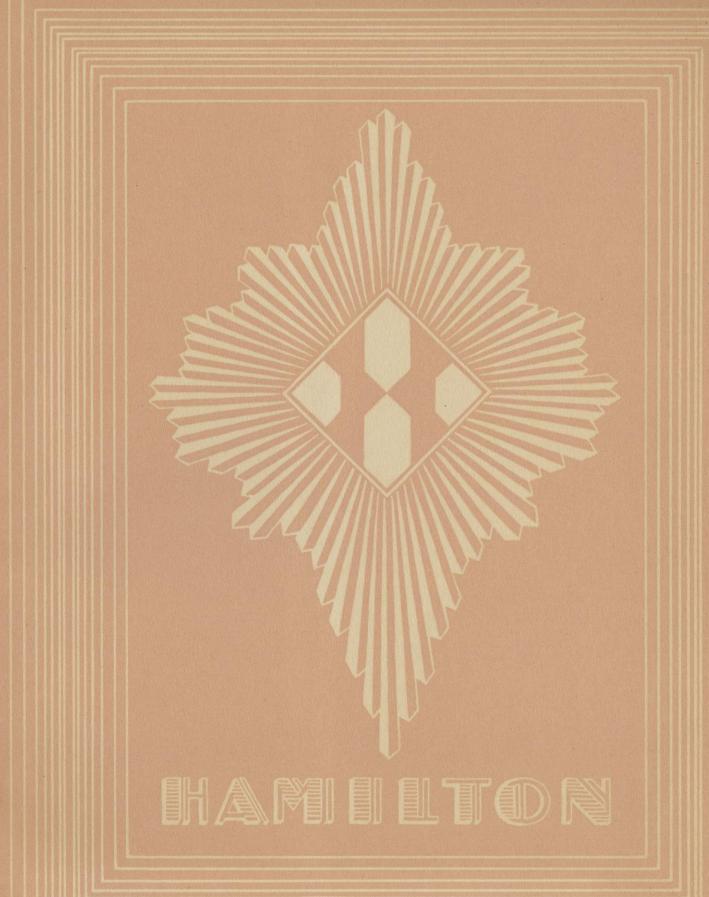
For information on re-use see: http://digital.library.wisc.edu/1711.dl/Copyright

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

# HAMILTON OPTICAL FURNITURE

HAMILTON



# OPTICAL FURNITURE



HAMILTONIZE

and

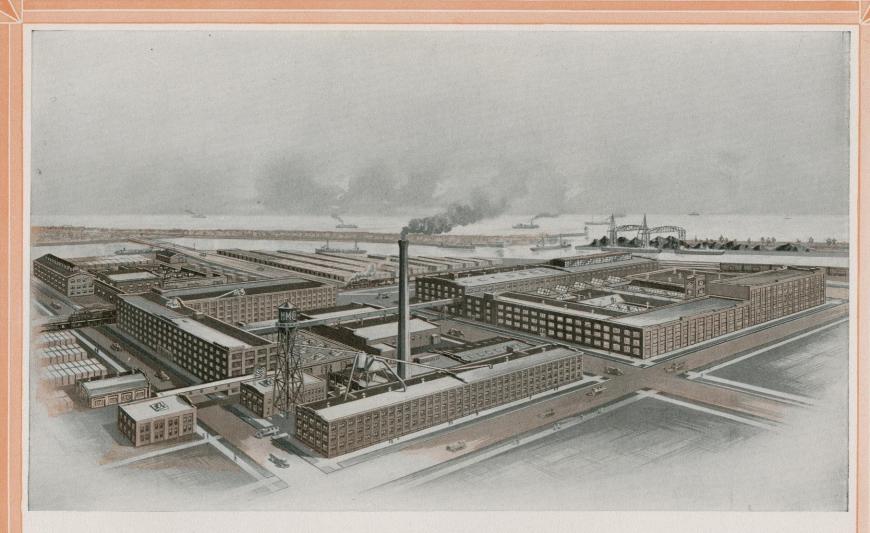
ECONOMIZE

CATALOGUE No. 3

# HAMILLTON MIFG. CO.

General Sales Office and Factory: TWO RIVERS, WISCONSIN

Chicago, Illinois Rahway, New Jersey; Los Angeles, Calif.



GENERAL SALES OFFICES AND FACTORY

### HAMILTON MANUFACTURING COMPANY

TWO RIVERS, WISCONSIN

# PREFACE

HE importance of human sight cannot be over estimated, and the optical profession as an aid to civilization and scientific progress should have the earnest co-operation of every thinking man. It would be almost impossible to estimate the increased earning value of the millions of people who by scientific treatment of the eye and the fitting of lenses have been enabled to continue their chosen occupations.

The Hamilton Manufacturing Company through co-operation with the optical profession, have produced a line of furniture illustrated herein, which is designed to assist, and promote to the greatest degree possible, the efforts of men in the optical field to serve the public efficiently and economically.

The designs shown have been evolved by careful consideration of the particular requirements of each piece, so that they will be of the greatest assistance to the operator; and especial attention has been directed to their artistic appearance.

It is an accepted fact that anything which will tend to put the patients at ease, and that will help them to relax mentally and physically, will be a distinct asset—both to the operator and the patients—in optical treatment and refractive work.

Therefore we have attempted to produce optical furniture that will give the impression of efficiency and professional success, and which will have a favorable psychological effect on the patient.

Nearly half a century ago the Hamilton Mfg. Co., was founded on the idea that quality was more important than quantity, and that the best is really the most economical in the end. This idea has been adhered to, to this day, rigidly and consistently.

The remarkable growth of this company is due to the progressive policy and foresight of its founders, with the result that today Hamilton products are known for excellent quality all over the civilized world.

In the forepart of this book are illustrated and described a few of the reasons why Hamilton Optical Furniture should be the choice of progressive Oculists, Opticians and Optometrists.

# Hamilton Standards and Manufacturing Practice

THE first consideration in the manufacture of Optical Furniture is naturally the raw materials, and as most cabinets and desks are made of mahogany, a short description of this material and its origin is given here.

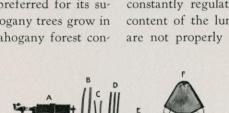
#### SOURCE OF MAHOGANY:

Hamilton mahogany comes

from the Gold Coast of Africa. This is the best mahogany known and it is preferred for its superior grain and figure. Mahogany trees grow in the tropical jungle, and a mahogany forest con-

tains on the average one marketable tree to an acre. When ripe for cutting, these trees are one hundred years old and 5 or 6 ft. thick. They are felled about 10 ft. from the ground and then dragged by native labor to the nearest river bed. When the tropical storms cause the

river to be flooded, the logs are floated to the coast and from there to America by steamer.



A Mahogany Log Jam in Africa

The Scale, Test Pieces, and Hygrodeik

#### SEASONING AND DRYING: Our cabinet

lumber is air-seasoned from three to six months before it is shipped to us, after which we season it until its moisture content is from 16 to 24 per cent before it is placed in our dry kilns. The lumber is then kilndryed to a moisture content of 5 per cent. Experienced men with scientific apparatus make daily tests

and the uniformity of the drying.



Lumber Tempering

LUMBER TESTING: The cut below shows four test pieces which were cut from the center of several planks. The pieces B, C and D are tests for case hardening, which results from improper drying. Each kind of wood requires a different treatment in the dry kiln, to properly

dry it. Also the humidity and heat must be constantly regulated according to the moisture content of the lumber. When these conditions are not properly regulated, case hardening re-

> sults and the tests which are taken daily will tell the operator just what is wrong. Test piece B shows that the lumber was dried too rapidly with too little humidity, closing the pores on the outside causing case hardening. It must then be re-steamed and re-dried in

the kiln. Test piece C shows reverse case-hardening and must be treated the same as before but to a greater extent. Test piece D is a piece

> that was properly dried. All Hamilton cabinet wood must pass this rigid test.

#### MOISTURE DISTRIBU-

TION: Test piece E is used to determine the relative moisture content of the center and outside of the lumber. The outside and center pieces are weighed on accurate scales before

of the lumber to ascertain its moisture content and after drying. A comparison of the weights will show the relative moisture distribution.

#### THE FOXBORO AUTO-MATICDRY-KILN REGU-

LATOR: The regulators shown in the illustration on the right automatically control the humidity and temperature in the kilns. They may be set for a high humidity and a low temperature, or a low humidity and a

high temperature, depending upon conditions required for the particular lumber in each kiln.

THE TEMPERING SHEDS: When the lumber is taken from the dry-kiln it has a moisture content of 5 per cent in the center of the lumber, 4 per cent near the surface. It is then placed in the tempering sheds for seasoning,

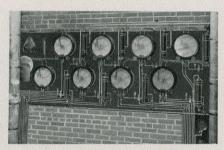
where it will gradually become adjusted to a moisture content of 5 per cent throughout.

# FACTORY CONDITIONS: Another point of great importance is the atmospheric conditions in the wood-working factory. In winter the air throughout the factory

is automatically humidified and heated so as to keep a moisture content of 5 per cent in the cabinet work. In summer the excess humidity is extracted from the air by the introduction of dry air until the proper humidity is reached. This is

a very important precaution and insures cabinets that will not give trouble later by checking or pulling apart at the joints, panels, etc.

Hamilton Cabinets are made by the most modern scientific and laborsaving methods.



Automatic Dry Kiln Regulators

MENT: This department draws its lumber from the tempering shed stock. Here it is cut into lengths and widths. The photo below shows a battery of high speed cut-off saws and self-feed ripping machines, in one of the cutting rooms.

THE CUT-OFF DEPART-

From here the lumber is moved to the planing room where it is planed smooth for proper working.

**CABINET MAKING:** Shown below is a photo of a small part of our cabinet making department, illustrating the modern, well-lighted and healthful conditions in which our workers pro-

duce the finest line of cabinets obtainable.



The Cut-Off Department

#### **FINISHING**

Building efficiency and durability into a cabinet is not sufficient. The natural beauty of the wood must be preserved by skillful finishing. A beautiful cabinet will create a favorable psychological

effect that is valuable to the operator.

PRELIMINARY OPERATIONS: Proper finishing requires 18 days. After two weeks in the finishing room, they are inspected for possible

> defects. If they pass this test, a hot water sponge bath is applied followed by sanding. The water stain is then applied bringing out the natural beauty of the wood. All drawers and doors must be uniform in color and grain.



Cabinet Making

FILLING AND VAR-NISHING: A double coat of filler is then placed on the cabinet to insure a perfect surface for the shellac and varnish which are next applied. Two coats of shellac and three coats of varnish are necessary

Varnish Room and Spray Booth

to give the grade of finish we require. A complete hand sanding is given the cabinets between each of the above operations. After each varnishing operation, they must be dried in the kilns at a temperature of 112° and a relative humidity of 45, for at least 48 hours; with the final drying requiring 4 days of air drying. Our varnish dry-

ing kilns have a capacity of 150 cabinets simultaneously.

RUBBING: The rubbing operation which follows is another important factor in properly finishing a cabinet. Cabinets are oil rubbed with a felt block. This operation is done by hand and requires three hours of intensive and conscientious rubbing on each cabinet.

INSPECTION: After rubbing, the cabinet is ready for the final inspection. Here an expert finisher, a craftsman of the old school, sits in final judgment on the finished cabinet. He goes carefully over the cabinet searching for minute defects such as pin holes, checking and sagging of the varnish. After this careful examination,

the cabinets are inspected two more times.

TRIMMING DE-PARTMENT: When the cabinets leave the finishing department they are sent to the trimming rooms. None In general, the trimming department puts the cabinet in perfect condition for the user.

work.

BOXING: After trimming, the cabinets are sent to the boxing and shipping departments. It is not a simple matter to properly box an expensive optical cabinet or desk, so that it

will reach its destination in perfect condition. Our shipping boxes are designed to support each part rigidly and protect the contents from rough handling. These boxes are padded and braced so that no part of the cabinet or desk is subject to undue strain.

but expert workmen are

permitted to assemble and trim Hamilton Cab-

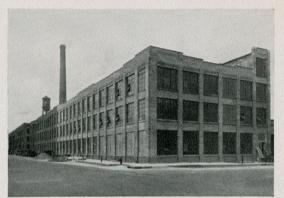
inets, as imperfect workmanship at this stage

would be disastrous. The

proper trimming is an

extremely important

part of optical cabinet



New Addition to Factory

#### HAMILTON EXPAN-SION: Nearly every

year for the past fifteen years, we have been replacing old buildings, adding new buildings and increasing our manufacturing capacity. During the year 1929 we increased our floor space 25%. The photo at the left shows a large 3-story, half block addition to our steel plant and we have also completed another ad-

dition adjoining it.

The cut at the left shows the new large train shed and shipping department. Our 1930 building program includes a large 4-story administration building which we will complete early in 1931.



New Train Shed and Shipping Dept.

# Practice Building Offices



Testing Room of H. S. McCray



Fitting Room of T. F. Rawling

## Trial Lens Cabinets Nos. 9198-9199



No. 9198 without light No. 9199 with light as shown

Nos. 9210, 9212, and 9214 Trays, shown on page 11. These trays, when ordered with the cabinet, will match in finish and general appearance.

**ELECTRIC LIGHT:** This may be tilted to any angle to illuminate the lens tray irrespective of other sources of light.

**SLIDE:** There is a large slide convenient for writing or for instruments, etc.

**DRAWER:** The drawer is  $21\frac{3}{4}$  x  $8\frac{9}{16}$  x  $2\frac{1}{4}$ " inside.

**CUPBOARD:** It has a large cupboard with one removable shelf.

MATERIAL AND FINISH: Furnished in mahogany, or oak in any finish desired, or white or gray enamel.

**DIMENSIONS:** Width, 273/4"; Depth, 12"; Height, 501/2".

VER since its introduction, this lens cabinet has been our largest selling cabinet. It is beautiful in appearance, designed for the greatest convenience, and is also space saving as it is only 12" deep.

A NEW FEATURE: At no extra cost, the efficiency of this cabinet has been increased greatly by the addition of a swinging bracket or carrier, which permits the lens tray to be swung out of the cabinet, into the most convenient position for the operator. When the tray is swung back into the cabinet, the roll curtain on left and

right may be closed. The space for the lens tray is 141/4 in. by 201/4 in. and will take any of the standard lens trays, in cluding our



Showing Lens Tray Swung into Cabinet, and Roll Curtain partly closed.

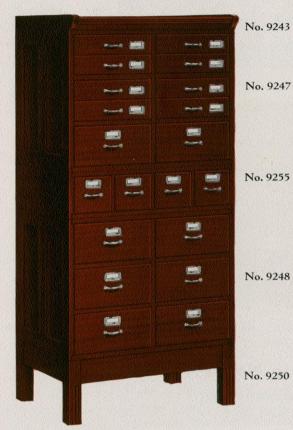


Testing Room of C. C. Clemens

# Page Image not Available

Missing Pages 9 - 16

# Sectional Stock Cabinets



Combination No. 9256

Insert A—Twelve Compartments for supplies. For No. 1 Drawer.

Insert B—Sixty-five Compartments for Uncut Lenses. For No. 1 Drawer.

Insert C—For Edged Lenses. For No. 1 Drawer.

Insert D—Cardboard Boxes 13/8" x 31/8" x 51/8". Each No. 2 Drawer takes 16 boxes, and No. 3 Drawers take 36 boxes. Insert E—Front to back partitions for No. 2 and No. 3 Drawers making compartments 14" long inside. These partitions will make three compartments in a No. 2 Drawer and six compartments in a No. 3 Drawer.

Insert G—Cross partitions for No. 2 Drawers making four compartments,  $3\frac{3}{8}$ " x  $6\frac{1}{4}$ " x 6" high inside.

Insert H—For frames or cases. 16 compartments  $13/8'' \times 3.5/32'' \times 51/8''$  high inside.

Insert K—For storage of small parts. Insert L—Cross partitions for No. 3 Drawer, making 4 compartments, 31/4" x 133/8" x 6" high inside. AMILTON Sectional Stock Units are made for long life, service and beauty. They will always remain an ornament to the office, as well as a very practical piece of furniture. For the efficient handling of your stock, there are drawers and inserts of the proper size for each purpose.

The drawers are interchangeable, i. e. two shallow drawers No. 1 occupy the same space as two deep drawers No. 2; or one large deep drawer No. 3, occupies the same space as either two No. 2, or two No. 3 drawers. This makes it very flexible as you can rearrange your stock at any time.

#### MATERIAL AND FINISH

Made of birch, mahogany finish; or of oak, any finish desired.

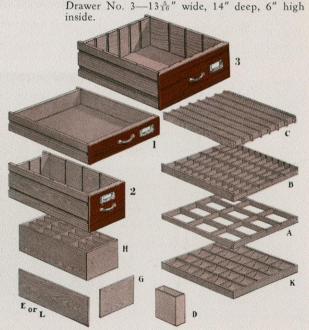
#### DIMENSIONS

All units except the corner unit and the mirrors are  $30\frac{1}{16}$ " wide and  $17\frac{3}{6}$ " deep. All stock units are  $22\frac{1}{16}$ " high. The height of other units are given under each illustration.

#### DRAWERS AND INSERTS

Drawer No. 1—13 $\frac{5}{16}$ " wide, 15" deep, 2 $\frac{3}{4}$ " high inside.

Drawer No. 2— $6\frac{5}{16}$ " wide, 14" deep, 6" high inside.



Showing the Various Drawers and Inserts

# Practice Building Combinations

#### Combination No. 9252

HE following Units are used to make up this combination: Three Cap Units No. 9243, one mirror No. 9244, with beveled mirror 12" x 26", one Card File Unit No. 9255, for 4" x 6"

Cards, two upper end Units No. 9235, two lower end Units No. 9246, lower center Unit No. 9247, and three Base Units No. 9240 with toe space.

When Card File Unit is not wanted, order Mirror No. 9245, which has a beveled mirror 20" x 26" and will be flush on top with other units.

#### **DIMENSIONS**

Width overall, 92". Height overall, 543/8". Depth overall, 183/8".



Combination No. 9252

#### Combination No. 9257

HIS combination consists of the following Units: Four Cap Units No. 9243, one Mirror No. 9249, with plain mirror 18" x 55½", two upper end Units No. 9235, four lower Units No. 9258, four Base Units No. 9240 with toe space.

Also two Fitting Desks No. 9233, two Fitting Desk Chairs No. 9270, and two Fitting Desk Stools No. 9271. **DIMENSIONS overall:** Width, 1223/4"; Height, 543/8"; depth, 183/8".



Combination No. 9257

# Practice Building Combinations

Combination No. 9260



E show on this and the preceding page a few combinations possible with these Units.

The drawers are interchangeable, in any formation.

Whenever Units are arranged in a corner, as in Combination No. 9261, it is necessary to include one Corner Unit No. 9259.

This combination consists of the following units: Two Mirrors No. 9245, three Cap Units No. 9243, upper center Unit No. 9235, three lower Units No. 9246, and three Flush Base Units No. 9241. If Card File Unit is used on either end, order Mirror No. 9244, which will be flush at top as shown. **DIMENSIONS:** Width overall, 92"; Height overall, 543/8"; Depth, 183/8".

#### Combination No. 9261

HIS Corner Combination consists of the following units. Two Mirrors No. 9245, four Cap Units No. 9243, two Upper Units No. 9235, Corner Unit No. 9259, with 12" door, two lower center Units No. 9247, two lower end Units No. 9246, and four Flush Base Units No. 9241. Also one Fitting Desk No. 9233, one Fitting Desk Chair No. 9270, and one Fitting Desk Stool No. 9271.

If desired Card File Unit No. 9255 may be used on either end, when Mirror No. 9244 should be ordered.

The entire combination will then be flush on top as shown.

#### DIMENSIONS

Length overall, 88½". Width overall, 88½". Height overall, 54½". Depth overall, 18¾".



Combination No. 9261

# Sectional Stock Cabinets



21/2" Cap Unit No. 9243



6" Flush Base Unit No. 9241



6" Toe Space Base Unit No. 9240



101/2" Sanitary Base Unit No. 9250



18" Sanitary Base Unit No. 9239



Stock Unit No. 9235



Stock Unit No. 9236



Stock Unit No. 9237



Stock Unit No. 9246



Stock Unit No. 9247

# Sectional Stock Cabinets



Stock Unit No. 9248



Stock Unit No. 9258



Stock Corner Unit No. 9259 Height overall 54½"; Width overall 26¾"; Door 12" Wide.



Card File Unit No. 9255 For Cards 4" x 6". Height 75/8".

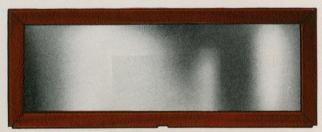
## Mirrors



Mirror No. 9244
This mirror is one unit wide and is to be used above the card file unit. It is shown on combination No. 9252. Beveled mirror  $12'' \times 26''$ .  $16'' \times 29\frac{15}{16}''$  overall.



Mirror No. 9245
This is also one unit wide, and when placed on the cap unit, will line up on top with other units. See combinations Nos. 9260 and 9261. Beveled mirror 19\frac{3}{16}" x 26". 23\frac{1}{16}" x 29\frac{15}{16}" overal.



Mirror No. 9249

This mirror is two units wide and is flush at the top with other units; see combination No. 9257. Mirror  $18'' \times 55\frac{1}{2}''$  (plain). Dimensions overall,  $23\frac{2}{16}'' \times 60\frac{5}{8}''$ . Upright U shaped mouldings are supplied for supporting mirror on left and right ends. Best quality mirrors. Frame

made to match units in wood and finish.

- 21 -

# 

| Article No.    | Article                                       | Page   |
|----------------|---|--|
| 9198-9199      | Trial Lens Cabinet                            | . 8  |
| 9196-9197      | Trial Lens Cabinet                            | STATE OF THE STATE |
| 9206-9207      | Trial Lens Cabinet                            |  |
| 9208-9209      | Trial Lens Cabinet                            | . 11   |
| 9210-9212-9214 | Trial Lens Tray                               |  |
| 9217           | Fitting Desk                                  | . 12   |
| 9225-9226 *    | Fitting Desk                                  |  |
| 9233           | Fitting Desk                                  |  |
| 9223-9223-A    | Revolving Mirror                              |  |
| 9270           | Fitting Desk Chair                            |  |
| 9271           | Fitting Desk Stool                            |  |
| 420            | Set Ezy Stool                                 |  |
| 9264           | Plier Rack                                    |  |
| 9280           | Professional Desk—Flat Top                    | . 16   |
| 9281           | Professional Desk—Roll Top                    | . 16   |
| 9282           | Professional Desk—Typewriter Drawer           |  |
| 9283           | Professional Desk—Card File Insert            |  |
| 1002           | Swivel Chair                                  | . 16   |
| 1003           | Office Chair                                  |  |
| 9256           | Stock Unit Combination                        | . 17   |
|                | Drawers and Inserts for Stock Units           | . 17   |
| 9252           | Drawers and Inserts                           | . 18   |
| 9257           | Drawers and Inserts                           | . 18   |
| 9260           | Stock Unit Combination                        | . 19   |
| 9261           | Stock Unit Combination                        | . 19   |
| 9243           | Sectional Stock Cabinets—Cap                  | . 20   |
| 9241           | Sectional Stock Cabinets 6" Flush Base        |  |
| 9240           | Sectional Stock Cabinets 6" Toe Space Base    | . 20   |
| 9250           | Sectional Stock Cabinets 101/2" Sanitary Base |  |
| 9239           | Sectional Stock Cabinets 18" Sanitary Base    |  |
| 9235           | Sectional Stock Cabinets Drawer Unit          |  |
| 9236           | Sectional Stock Cabinets Drawer Unit          |  |
| 9237           | Sectional Stock Cabinets Drawer Unit          |  |
| 9246           | Sectional Stock Cabinets Drawer Unit          |  |
| 9247           | Sectional Stock Cabinets Drawer Unit          |  |
| 9248           | Sectional Stock Cabinets Drawer Unit          |  |
| 9258           | Sectional Stock Cabinets Drawer Unit          | . 21   |
| 9259           | Sectional Stock Cabinets Corner Unit          |  |
| 9255           | Sectional Stock Cabinets Card File Unit       |  |
| 9244           | Mirror, Beveled Mirror 12" x 26"              | . 21   |
| 9245           | Mirror, Beveled Mirror 19-3/16" x 26"         | . 21   |
| 9249           | Mirror, Plain Mirror 18" x 551/2"             | . 21   |

¥Fitting Desk No. 9226—Same as No. 9225 except that it is without the 4-drawer unit

"All Works of Quality must bear a price in proportion to the skill, time, expense and risk attending their invention and manufacture. Those things called dear are when justly estimated, the cheapest. They are attended with much less profit to the artist than those things which everybody call cheap. Beautiful forms and compositions are not made by chance nor can they ever, in any material, be made at small expense."

- RUSKIN.

MOEBIUS -- MILWAUKEE

PRINTED IN U.S.A.

# HAMILTON

