The *Gibson* Master Mandolin

Style F-5

The "Strad" of Mandolins

A New Standard —of— Instrument Making

Tone of Marvelous Power and Richness

Matchless Workmanship and Finish

Master Mandolin Specifications

Extreme length of instrument 27½".
Extreme width of sounding-board 9⅞".
Length of sounding-board 11".
Length of neck from nut to body of instrument 7½".
Length of scale 13⅜".
Width of finger board 1⅝" at the nut, 1⅜" at the 12th fret.
Weight of instrument 2¼ lbs.
Weight of instrument and carrying case 10 lbs.
Weight of instrument and carrying case packed for shipment 17 lbs.

Price $250

Price complete with artists carrying case (Faultless No. 440) as shown on page 2 of this folder

$275

FEATURES OF CONSTRUCTION AND ACOUSTICS

The Gibson Master Mandolin is not a mere revamping of ordinary mandolin construction, but is in many respects different than any other instrument hitherto made. *As a result of the changes and improvements in construction* the tone is bigger and of richer quality. A fundamental change is the treatment given the Master-model sounding-board, which has *f*-holes adapted to plectral instrument construction, instead of an oval sound hole. It will be noted that the finger board is elevated from the sounding-board and the sounding-board is longer* than any other mandolin sounding-board and so constructed that the bridge may be placed in the middle. Other important changes in construction are outlined on this page.

*This means that the distance from the tail piece to the bridge is over an inch greater than on other model Gibson instruments, including the regular artist model; consequently the player's arm must be farther over the rim of the instrument and the strings attacked farther away from the tail piece than with other models, even when the strings are picked the same relative distance from the bridge. The usual place for attacking the strings on the Master Mandolin is about 1⅜" from the bridge, but the player who wishes to have at his command the greatest variety of tone color will be able to attack the strings at any point between 1¾" from the bridge to the twelfth fret.

World's Finest Materials

ONLY the world's finest materials, selected by experts, can enter in the creation of the Gibson Master Model —the world's finest mandolin. Of first importance is the top, and for this we use the very choicest selection of clear, fine-grained, Norway Spruce. For the back and rim the world provides nothing better or more beautiful than our own Michigan figured Maple. For the slender neck, which is a delight to the hand of the player, great strength is secured as well as wonderful beauty under the expert touch of our finishers, by using careful selection of curly maple stock—also a Michigan product. The best of Ebony from French Congo is used for the finger-board.

Exclusive Gibson Features

Not only is the Gibson Master Mandolin the last word in instrument construction, *it actually embodies more improvements than had been made in the entire history of fretted instrument making up to the time Gibson completed his first mandolin with arched and graduated top and back.*

Some of the advances represented in the Master Mandolin are:

1. *f* sound holes of the right size and shape, properly located in relation to bridge, sounding-board, and air chamber, replacing the round or oval sound hole. The first successful application in fretted instrument construction of the *f* sound hole principle. As applied in Gibson construction the *f* sound holes:
   (a) Make the top more sensitive yet leave it strong enough to support indefinitely the string pressure, and large enough to furnish all the area the strings can vibrate.
   (b) Tune the air chamber to the most effective pitch.
   (c) Allow as much contact as possible between the vibrating air in the body of the instrument and the outside air through which the sound wave travels.
2. Two tone bars under the top—one on each side.
   These tone bars are designed to vibrate the top as a whole in the most effective manner, and are placed with full appreciation of the differing needs of the highest and lowest register of the instrument. They are also planned to most thoroughly assist the top or sounding board in the reproduction of those overtones essential to desirable tone color. The tone bars are given individual treatment in every Master Model Mandolin to meet the individual requirements of the instrument.
3. Tops and backs tuned to the pitch determined to be most desirable.
   This is done before the tops and backs are glued to the rim. This means that each top and back is played on with a bow and struck with a hammer and its pitch determined accurately. The desired pitch is secured by regraduation of the top or back, change in the weight of the tone bars or length of the sound holes—any one or all, as may be required. After an instrument is assembled it is strung up and tested before going to the finishing department and if necessary, taken apart and further corrections made in graduation, weight of the tone bars or length of the sound holes.
4. Larger sounding-board with bridge placed in the middle. Extension of fingerboard elevated from sounding-board.
   The Master Model provides not only the much desired larger sounding-board area, but the application of the *f* hole principle permits placing the bridge in the middle, the correct place on an arched wooden top
5. Neck joins the body at the 15th instead of the 12th fret.
   The longer sounding-board with bridge in the middle permits moving the finger-board back several frets farther from the body of the instrument, thus facilitating fingering the high positions. When fingering in the 7th position (first finger on the 12th fret) the hand does not touch the body of the instrument.
6. Gibson patented truss-rod neck construction which permits use of an especially designed neck extremely slender and exquisitely shaped, yet fully capable of withstanding the enormous string tension which is an important factor in the production of the Master Mandolin's marvelous tone.
7. Specially designed Gibson elevated guard-plate or finger-rest (patented), beautifully finished to match ornamentation of the instrument.
8. Gibson patented adjustable compensating bridge—one of the most remarkable developments in the history of instrument making.
9. Special fastening for the guard-plate, eliminating clamps and other devices.
10. Gibson patented extension string holder.

It is impossible to more than name here the major exclusive Gibson construction features which are incorporated in the Master Mandolin. Full information regarding any or all of these will be gladly supplied on request.

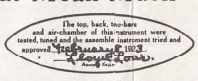
Finish and Ornamentation

In an instrument the type of the Master Mandolin, gaudy or unnecessary embellishments would be decidedly in bad taste. The rich beauty of the Cremona-brown shaded top and the flame finished back is set off admirably by a very fine white, black and white, pyralin inlay around the top and back edge of the instrument. The Gibson name and ornament inlaid in pearl in the head, the fine pearl nut and conventional round pearl position dots inlaid in the fingerboard, (both in the side and the top) add just the required touch to properly set off so truly an artistic creation as the Master Mandolin.

Special Refinements

Added richness is given the beautiful finish of the Master Mandolin by the use of an engraved silver tail piece and cover, specially designed machine-heads with nickel-silver worms, gears, gear shanks and string drums, all silver plated to match other metal parts. Machine-head buttons are all a fine quality of pearl.

Two Little Labels That Mean Much



EVERY Gibson Master Mandolin, like all other Gibson models, carries its own prepaid life insurance policy—the famous **Gibson Life-Guarantee Label.** For nearly a quarter of a century the Gibson life guarantee has been in force. It is a guarantee that actually **guarantees** without quibbling or equivocation. This is the text of the guarantee:

"The Gibson Master Model, style F-5 Number 71837 is hereby guaranteed against faulty workmanship or material. Should this instrument with proper care and usage, go wrong (usual wear excepted) we agree to repair it free of charge at our factory or to replace it with another instrument of same style or value."

In addition to the life guarantee label, every Master Model Mandolin carries a second label which is signed by the Engineer of Acoustics at the date of his final inspection of the instrument. Each Master Mandolin is built under the direct supervision of the Gibson Engineer of Acoustics.

All tops and backs are tuned and tested before and after assembling with the rims. Then, before any Master instrument is sent to the finishing room it is completely assembled and tested, and if necessary is again dissembled and such changes in graduation in the tone bars are made as may be necessary to bring the instrument to the required standard. After the instrument has left the finishing room it is again tested and if it meets the standard qualifications required of the Gibson Master Model Mandolin the Engineer of Acoustics puts his signature and date on the label which the instrument carries thenceforth.

The two labels represent the assurance of quality and lasting satisfaction—superiority of tone and permanency of construction—which the Gibson company gives the purchaser of each Master Model and on which we stake our reputation without reservation.

GIBSON MANDOLIN-GUITAR COMPANY, *Kalamazoo, Mich. U.S.A.*

A Talk About Tone

By Lloyd Loar, mus. m.

Gibson Acoustic Engineer

Lloyd Loar
The "Stradivarius" of the Gibson Master Mandolin

TONE color is determined by the number, identity, and proportion of the overtones or partials present in the tone of an instrument. In a string instrument these overtones or partials are primarily produced by the string vibrating in sections which are contained within the total ellipse of the vibrating string, each section decreasing in length in the ratio of whole numbers and vibrating faster in the same ratio. This will be better understood after the reader has studied the table below which gives the overtones possible to a G mandolin string.

Overtones	String Vibrating In Equal Sections	Rate of Vibration in proportion to fundamental	Nearest Actual Pitch on the Staff
First	Two	Twice as fast	G, 2nd line of staff
Second	Three	Three times as fast	D, 4th line of staff
Third	Four	Four times as fast	G, octave above 1st overtone
Fourth	Five	Five times as fast	B, 2nd added space above staff
Fifth	Six	Six times as fast	D, octave above 2nd overtone
Sixth	Seven	Seven times as fast	F, 4th added space above
Seventh	Eight	Eight times as fast	G, octave above 3rd overtone
Eighth	Nine	Nine times as fast	A. fifth added space above
Ninth	Ten	Ten times as fast	B, octave above 4th overtone
Tenth	Eleven	Eleven times as fast	C, five added lines above
Eleventh	Twelve	Twelve times as fast	D, octave above 5th overtone
Twelfth	Thirteen	Thirteen times as fast	E, 2 octaves above open E string
Thirteenth	Fourteen	Fourteen times as fast	F, octave above 6th overtone
Fourteenth	Fifteen	Fifteen times as fast	F#, half tone above 13th overtone
Fifteenth	Sixteen	Sixteen times as fast	G, octave above 7th overtone
Sixteenth	Seventeen	Seventeen times as fast	G#, half tone above 15th overtone
Seventeenth	Eighteen	Eighteen times as fast	A, octave above 8th overtone
Ftc.	Etc.	Etc.	Etc.

It is not possible in the limited space available to discuss the above table at length, although such comment and explanation would be very interesting. In brief, however, we may say that in every musical tone some of these overtones, up to the 30th, are present in varying proportions.

Each series of overtones effects the tone in a different way. That series which is the same pitch as the fundamental (although in different octaves—and shown in our table as the first, third, seventh and fifteenth) adds brilliancy to the tone but *not* richness nor mellowness. The next series, a fifth from the fundamental (shown as the second, fifth and eleventh) also adds to the brilliancy but in addition contributes to the richness of the tone. The next series, beginning with the fourth overtone, adds *more richness* and almost *no* brilliancy. The further away the overtone is from perfect consonance with the fundamental, the *more* richness and *less* brilliancy the overtone adds.

When a mandolinist or violinist plays natural harmonics, he places his finger at the *nodal* point of that overtone having *the same pitch as the harmonic he wants*, and the nodal point is found by computing the number of sections in which the string is to vibrate. Now refer to our table: For the first overtone touch the string one-half the distance from the nut to the bridge. For the second, one-third the distance. For the third, one-fourth the distance, etc. It is evident that natural harmonics furnish a way to measure the number and proportion of overtones present, for when the player touches the string at one of the nodal points he stops vibrations of all sections of the string vibrating at a lower rate of speed than the particular overtone produced at that point, leaving that overtone as the lowest pitch in the resulting tone and consequently making the resulting harmonic that pitch. The overtones *above* the lowest one left are still sounding, however, and may be eliminated one by one until nothing is left. When the string is stopped completely by the finger—that is, pressed clear to the finger-board—the quality of tone is different from the same pitched harmonic because the *fingered note has its own fundamental, and sets up a series of overtones of its own while the harmonic has only what is left of the series belonging to that open string.*

The tones of many non-Gibson mandolins have been analyzed in this way and invariably the overtones have been scanty in number, lacking in power and mostly of the series making the tone brilliant but thin, nasal or colorless. The first five or six only are present and the fundamental is usually too great a percent of the total tone, with the result that the tone is dull and hollow, or thin and colorless. *With the Gibson Master Mandolin it is possible to isolate and identify the first twelve overtones on the G string; the 2nd, 4th, 5th, 6th, 8th, 9th and 10th are decidedly present and all of these enrich and beautify the tone.* The 1st, 3rd, 7th, etc., are also there but this series is usually present so is not here emphasized.

So, in commenting on the beautiful tone color obtained from the Master Mandolin we have something more to go on than individual opinion, *for the overtones produced compare favorably in number and proportion with those of the violin, trumpet, clarinet, French horn and any of the other orchestral instruments noted for their rich, ull tones.*

The MASTER Mandolin

Gibson

A NEW WORLD STANDARD IN MANDOLIN MAKING

Unprecedented Volume and Carrying Power

Gibson first provided a Mandolin suitable for orchestra and solo use in large auditoriums. The Gibson Master Mandolin now carries Gibson construction to its logical and triumphant conclusion. A tone you have hardly dared dream of—with volume and carrying power that set a new standard for all time, affording the soloist or orchestra player resources never before available even in the finest instruments.

Extraordinary Tone Quality and Color

The Gibson Master Mandolin offers new opportunities and almost limitless resources of expression and interpretation—endless variety of effects in shading of tone color from brilliancy to warmth from the most delicate pianissimo to a big full tone—effects mandolinists have longed for but never until this time have been able to achieve.

Tone color is determined by the number, identity and proportion of overtones or partials present in the tone of an instrument. The average *non*-Gibson Mandolin has a dull and hollow, or thin and colorless tone, because the overtones are scanty in number, lacking in power, or of the wrong series. Any Gibson instrument has more overtones than can be found in other makes, but *the Master Mandolin has overtones in far greater number and in more correct proportion than found in any other mandolin;* comparing favorably in this respect with the finest violins, trumpets, clarinets, and French horns—orchestral instruments noted for rich full tone.

Design, Workmanship, Finish, a Veritable Gibson Triumph

The Gibson Master Mandolin is built first and foremost to produce a tone exquisite in quality and unlimited in volume, but thanks to the skill of our engineers of acoustics and construction, and to Gibson craftsmen, the Master Model is as matchlessly beautiful to the eye as to the ear. The world-famous Gibson Artist model design as adapted in the Master Mandolin leaves nothing to be desired in point of beauty, and the workmanship throughout compares more than favorably with the *finest handiwork of the world's greatest violin makers of this or any other day.* Materials are chosen with the greatest care. The great air-seasoning sheds of the Gibson Company are kept supplied with the finest woods procurable and the four quarters of the globe are constantly being searched that there may be no shortage of thoroughly seasoned stock. The very choicest of these woods is selected for the Master Mandolin, and from the minute the rough slab starts in work until it comes out in the finished instrument, it is subjected to constant and rigid inspection.

Only skilled Gibson craftsmen who have been working in the Gibson workshops for years are entrusted with the building of these Master instruments. The finishing is done by a master of his craft. *No expense or effort is spared that the Master Mandolin may truly be the ultimate attainment of the world's Master Mandolin makers.*

Gibson Master Mandolin, Style F-5
Shown in Special Faultless Combination Carrying Case No. 440, Price complete $275.00

Special Faultless Combination Carrying Case No. 440 is of the best quality four-ply veneer, built on a steel frame; heavy keratol covering — absolutely water-proof and wear-resisting; beautiful heavy plush padded lining; compartments for music and music stand, picks and strings. Clasps, lock and metal parts heavily nickeled brass. A case in every way worthy of the Master Mandolin for which it is especially designed.