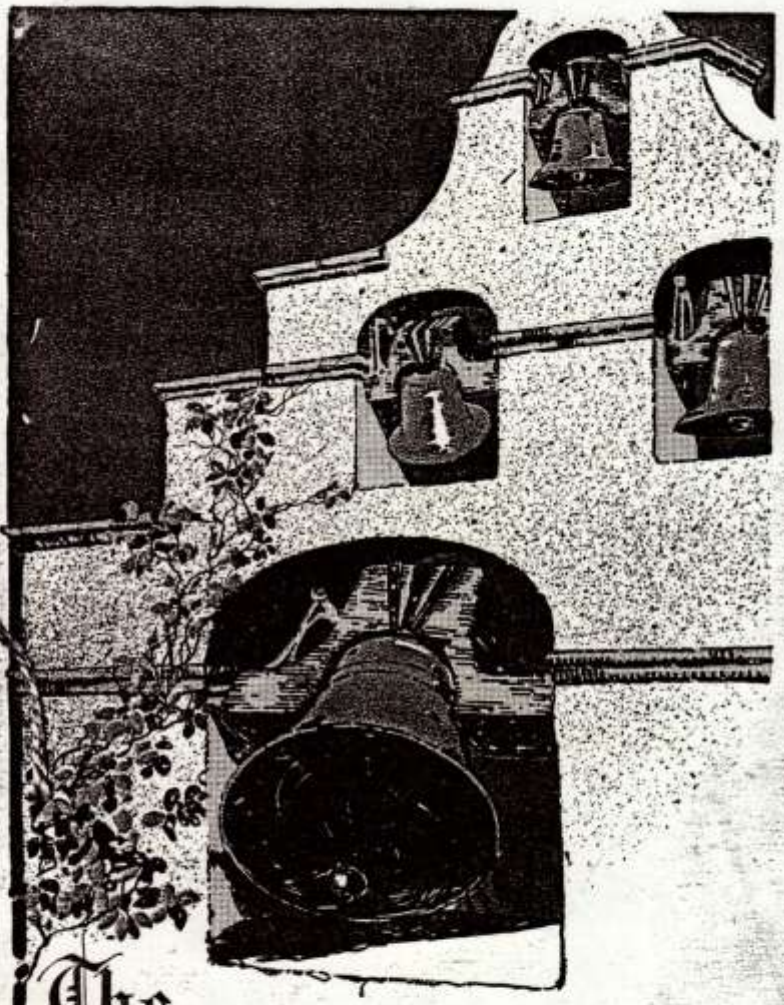
The Fredericktown Bells

Have Assembled the
Masses for More
Than 66 Years



The Fredericktown Bells

THE J. B. FOOTE FOUNDRY CO. FREDERICKTOWN, OHIO.

Time Tried and True

FOR more than 66 years Fredericktown Bells have assembled the masses in various corners of the earth and they stand today as examples of American ingenuity—practically perfect in every desirable characteristic.

The evolution of history, the reading of mythical legends and poetry pertaining to bells has had a tendency to associate with them a particular sentiment unlike that felt toward any other manufactured article and to unconsciously arouse in the minds of some people a vague impression that bell making requires almost supernatural ability.

While not requiring any superhuman ability, bell making does necessitate having uncommon aptitude and a vast knowledge of conditions as they exist, facts which can only be obtained through long experience. The makers of Fredericktown Bells have had just such experience, extending over more than 66 years and it is only natural to expect their product to be as high in quality as it is possible to attain.

It is unquestionably true that a bell of solid gold, while representing enormous value, would be wholly inappropriate for the purpose intended. By the same reasoning, it is also inconsistent and contrary to the laws of economics to make bells of more expensive metal than required to give the maximum results in tone, durability and all round good qualities.

In this connection the makers of Fredericktown Bells have done a great service by experimenting and developing a secret metal which produces bells equal in every respect to those of copper and tin but capable of being sold at a considerably lower price. This permits a larger bell to be bought for a given expenditure or obtains the desired size for a considerably smaller outlay, features of vital interest to all prospective purchasers.

In buying a Fredericktown Bell you are assured of obtaining satisfaction. They have been sold for practically a lifetime with the utmost success and are fully guaranteed by a company of high financial standing and reputation for fair dealing.

Tone

FREDERICKTOWN Bells have a peculiarly sweet and superior tone, due in part to the exclusive composition of metal used and likewise to the shape and proportioning of the bell, which have been accurately determined through continued experimenting extending over a period of 66 years.

The distance a bell can be heard and the quality of tone depends upon its size and weight and likewise upon the conditions and surroundings in which it is used. All things being equal, however, the sound of Fredericktown Bells will retain its clearness of tone and carry further than that of any other bell manufactured, including those sold at considerably higher prices.

In casting a Fredericktown Bell, the particular conditions under which it is to be used is duly taken into consideration and the composition proportioned to give the best tone for that particular service. The range therefore varies from the deep and solemn tone of the church bell to the sharp and alarming ringing of the fire bell.

Strength

THE Fredericktown Bell is scientific in construction, being proportioned with absolute correctness. The composition of the metals, the diameter and thickness are in harmony with the weight of bell, which reduces the liability of breakage to a minimum.

As evidence of our confidence in the strength of Fredericktown Bells we refer to our Guarantee in which we agree to replace any bell which breaks within five years.

Design and Balance

IN DESIGN Fredericktown Bells are extremely neat and practical.

The bell bowls are shaped and proportioned as to thickness at different points with extreme care in order to afford the best ringing qualities.

The side members are very symmetrical and sufficiently strong for all occasions.

Special thought has also been given in designing Fredericktown Bells to the subject of balance. As a result they ring with minimum vibration and strain on the bell parts and tower.

Adjustable Springs

ALL Fredericktown Bells 24 inches in diameter and larger are equipped with adjustable springs on the clapper.

This construction permits clapper to strike bell properly and then hold it away. Thus the vibration is uninterrupted, the disagreeable clattering noise avoided and the tone comes out full and clear.

If desired the spring may be adjusted by turning a small bolt, there being no necessity to force spring out with an iron bar as required by some kinds of construction.

Rotary Mounting

AFTER extensive use it is advisable to turn a bell on its vertical axis so that the tapper will strike in a new place, thus avoiding the liability of fracture. Provision for this is amply made in the design of Fredericktown Bells. To make this adjustment it is only necessary to loosen two nuts, turn bell to desired position and tighten them again.

Ample bearing surface is provided, at point yoke and bell come in contact, to hold bell firmly and give sufficient strength to the mounting.

Roller Bearings

OUR large and heavy bells Nos. 44 and 48 are equipped with roller bearings of the most approved design, which reduce friction to a minimum.

Finish

FREDERICKTOWN Bells are finished with a rich copper preparation which not only beautifies but protects them from the action of the elements. The mountings are heavily black enameled.

What Size Bell To Buy

THERE is sometimes a little doubt in the minds of prospective purchasers as to the size of bell they should purchase, a matter which is not altogether easy to decide. In such cases we would be glad to give advice, based upon our long experience if a little brief outline of conditions is furnished.

In this connection it might be well to refer in brief to the distance bells can be heard.

The conditions regulating the sound of a bell are numerous and beyond control, depending upon atmosphere, the height and construction of the belfry and the lay of the surrounding land. Hills greatly retard or muffle the sound while it travels very far through a valley or over level land or water.

Of course, the larger the bell the farther it can be heard, and consequently it is advisable to buy as large a bell as conditions will permit. Buying a bell is generally an event which happens just once in a lifetime and it is advisable to buy maximum satisfaction on this single occasion.

Fredericktown Church Bells

FREDERICKTOWN Church Bells are noted for their great volume; deep, dignified and sympathetic tones. Possessing every desirable characteristic such as pleasing tone, carrying power, neatness of design, strength, durability, etc., they always sustain the judgment of every purchasing committee and prove a source of pride and satisfaction to every member of the congregation.

In many of the older churches throughout the land Fredericktown Bells still ring out their gladsome sounds after more than half a century of satisfactory service. A large number of the younger congregations are also purchasing Fredericktown Bells after a thorough investigation of the field, as they find it impossible to obtain a proposition of equal value.

One feature of particular interest to church congregations is the fact that, for a given amount, they can obtain a larger Fredericktown Bell than if they bought one of copper and tin, while the results obtained will be equally satisfactory in every particular.

This is made possible by the secret composition of metal used, a product having behind it 66 years of bell making experience.

No. 30 to 48 Church Bell

No.	Approximate Diameter	*Approx. Wt. of Bell Complete	List Price
30	30 in.	570 lbs.	$ 65.00
32	32 "	640 "	75.00
34	34 "	765 "	90.00
36	36 "	950 "	110.00
38	38 "	1010 "	125.00
40	40 "	1300 "	150.00
44	44 "	1790 "	200.00
48	48 "	2280 "	250.00

Write for Discounts

*Weights given are for bells complete with mountings, bell bowls alone weighing about ⅔ of total.

Furnished complete as illustrated, except tolling hammer, which is included at extra cost when requested.

Fredericktown School Bells

WHILE called school bells because principally used in these buildings, the bells described on these pages are also adopted for small churches, halls, court houses, academies, etc.

They possess the same general good qualities as our church bells and will in every way equal their satisfactory performance.

Few bells are subjected to the hard, continuous service which a school bell gets and therefore it behooves the school officials to look carefully for durability and all round good qualities in the bell purchased.

In these features Fredericktown Bells have no equal. The special composition of metal used not only improves the tone but makes for strength as well, while particular attention is paid to this subject in the proportioning of various parts of the bowl.

No. 20 to 48 School Bell

No.	Approx Diameter	*Approx. Wt. of Bell Complete	List Price
20	20 in.	165 lbs.	$ 16.00
22	22 "	205 "	20.00
24	24 "	250 "	25.00
26	26 "	350 "	40.00
28	28 "	456 "	50.00
30	30 "	570 "	65.00
32	32 "	640 "	75.00
34	34 "	765 "	90.00
36	36 "	950 "	110.00
38	38 "	1010 "	125.00
40	40 "	1300 "	150.00
44	44 "	1790 "	200.00
48	48	2280 "	250.00

Write for Discounts

*Weights given are for bells complete with mountings, bell bowls alone weighing $\frac{2}{3}$ of total.

Furnished complete as illustrated above.

Fredericktown Fire Bells

FREDERICKTOWN Fire Bells possess that quality of tone so essential to a fire bell — a fierce, penetrating sound that really alarms and arouses the community to a true sense of the danger impending.

In many cities Fredericktown Bells are accepted as standard equipment and are bought without question whenever it becomes necessary to purchase such additional equipment. Communities not now familiar with the unusual qualities of these bells can purchase them with assurance of experiencing equal satisfaction.

The important service a fire bell has to perform is such that it is highly desirable to purchase the largest bell facilities will permit.

We strongly urge the purchasing of fire bells mounted as illustrated on the opposite page as being best adapted for general service. If desired, however, we can supply bells equipped to be hung from an overhead beam.

No. 130 to 148 Fire Bell

No.	Approximate Diameter	*Approx. Wt. of Bell Complete	List Price
130	30 in.	570 lbs.	$ 65.00
132	32 "	640 "	75.00
134	34 "	765 "	90.00
136	36 "	950 "	110.00
138	38 "	1010 "	125.00
140	40 "	1300 "	150.00
144	44 "	1790 "	200.00
148	48 "	2280 "	250.00

Write for Discounts

*Weights given are for bells complete with mountings, bell bowls alone weighing ⅔ of total.

Furnished complete as illustrated above.

Fredericktown Farm Bells

THERE is nothing quite as satisfactory for calling hungry people to their meals as a good bell, and farmers' wives, like all others want means of getting everyone there "before the dinner gets cold." In fact, the bell is now, and long has been, the accepted device for calling to meals, for alarm in case of fire or sickness and few, except the very small farms, are without them.

Nothing is quite so effective in working up a keen, healthy appetite as farm work, and the experience of hearing the welcome call to dinner on just a few occasions more than justifies the necessary expenditure, to say nothing of the satisfaction experienced by the wife.

Fredericktown Farm Bells are furnished with two different mountings, as illustrated on the opposite page, which enables purchasers to obtain an instrument exactly suited to their particular requirements.

Nos. 1, 2, 3, 8 Farm Bell

No. 4 Farm Bell

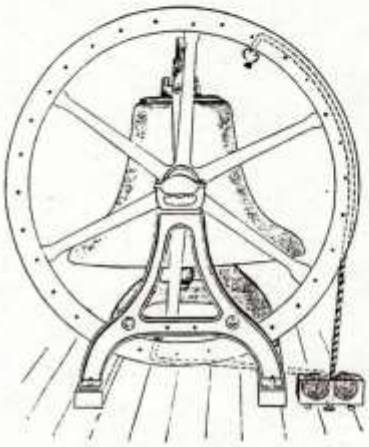
No.	Approximate Diameter	*Approx. Wt. of Bell Complete	List Price
1	15 in.	40 lbs.	$ 4.00
2	17 "	50 "	5.00
3	19 "	75 "	7.50
4	21 "	100 "	10.00
8	21 "	100 "	10.00

Write for Discounts

*Weights given are for bells complete with mountings, bell bowls alone weighing ⅔ of total.

Furnished complete as illustrated above.

Directions for Raising a Bell



IN CONSTRUCTING towers, provision should be made for hoisting the bell into position from the inside. If this is not done, however, bell may be easily taken in from the outside by means of a simple tackle.

Care should be taken to have the hoisting apparatus amply strong. The hoisting rope may be carried to the ground and passed through fixed pulleys and any number of men or a team employed to do the hoisting. When raised to proper height bell may be readily drawn into belfry by means of a small rope or tackle.

To Set Up a Bell

THE frame or mountings should first be placed in proper position. Then yoke put in proper place with the wheel on side opposite tolling hammer. If bell is a No. 44 or 48, remove cover from roller bearings and set the bell on the bearings, being

careful to see that the journals of the yoke rest only on the rollers. The bell should then be put in place with mouth up and the clapper inserted, care being taken to drive key well through and the ends opened up so that it cannot work out. The journals should now be well oiled and rung to test the adjustment of springs and clapper.

The tolling hammer is so simple that scarcely a word is necessary. Place the tolling hammer with the bell end up in such position that bell clears it in swinging. Then fasten the cross piece in proper position under the tolling hammer.

In all cases refrain from making adjustments until you have mastered the ringing of the bell. As you become familiar with the ringing you may find that no change is necessary. More trouble is caused by changes being made by those unfamiliar with bells than from all other causes.

To Balance a Bell

IF THE bell has been roughly handled in transit, which sometimes happens, you may find things that need correction. The bell may be out of balance, heavier on one side than the other, or the spring may have shifted out of place.

First, loosen the nuts on the top of yoke and turn until clapper and springs are in proper position. To balance bell, insert some yielding substance like soft wood or old leather between the bell and yoke on the heavy side, then tighten up and try again until the clapper and springs operate together and the bell is in balance. Allowance should be made for the weight of the rope if the test is made before the rope is attached. It is always best to have the bell somewhat opposite the rope side.

To Attach the Rope

MAKE a hole through the floor of ample size to allow the rope to pass through with ease. Attach the rope to the wheel on side opposite where rope passes down. Then have the

person who will do the ringing go down on the floor where he will stand when ringing bell. Swing the bell as in ringing to a point short of turning over and hold it there until the man on the lower floor makes a mark on the rope or ties some article to it to indicate where to arrest the bell.

To Adjust the Springs

IF THE clapper strikes twice it is because the spring on the side where this occurs, is too close to the bell bowl. This can be corrected, in the smaller bells, by inserting a bar under spring and bending it toward clapper, which will throw the spring away from the bell.

If the bell is our No. 44 or 48 it will contain adjustable springs as illustrated herein. To adjust spring unscrew bolt C and place a little piece of leather back of it, to throw spring in or out as desired.

To Ring a Bell Properly

IN RINGING a bell pull with sufficient force to carry the bell well up to the center. At first the force employed may be so great as to carry the bell over and give a little trouble. By observing the following instructions, however, this can be overcome.

The force to ring a bell should be exerted on the pull of the first two feet of the rope and the rope allowed free play until the limit is reached. The bell should then be under control so as to be easliy arrested and prevented from turning over, after which a strong pull should be given the rope to increase the rebound of the bell and secure a full stroke on the other side. In doing this be careful not to pull so far as to arrest the momentum of the bell.

After this short pull the rope should have free play to follow the wheel up as the bell ascends to give the second stroke.

These points, when mastered are known as getting the "knack" of ringing a bell properly.

Observe Particularly; Any violation of the following instructions will vitiate our warranty.

The toller must not be used when the bell is in motion. The bell must not be struck with the clapper or any instrument in any other place or in any other manner than the ordinary way of ringing or tolling.

Space Required for Our Bells

From No. 20 to No. 48

SIZE OF ROPE, DIAMETER OF WHEEL, AND HEIGHT IN INCHES.

No.	Space Required	Rope	Diameter Wheel	Whole Height
20	29x24	½	18	29
22	33x27	½	24	29
24	34x29	⅝	24	31
26	37x30	⅝	27	36
28	41x34	⅝	27	40
30	54x36	¾	32	41
32	54x37	¾	32	43
34	58x40	¾	36	46
36	60x45	1	36	50
38	65x50	1	38	57
40	65x50	1	49	57
44	72x60	1	59	65
48	76x65	1	75	81

If a larger bell is wanted than the belfry will allow, we can make a change in placing the tolling hammer, or a smaller wheel can be used. Space can be economized in other ways to adjust the bell to fit the belfry.