A 13TH CENTURY INSCRIBED METAL-BELL FROM PATAN (N. GUJARAT)

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The discovery of a metal-bell acquired from Pāṭan (N. Gujarāt) and now deposited in the Central Asian Antiquities Museum, New Delhi, is interesting as a material evidence for the art of metal-casting in Gujarāt for objects used in worship.

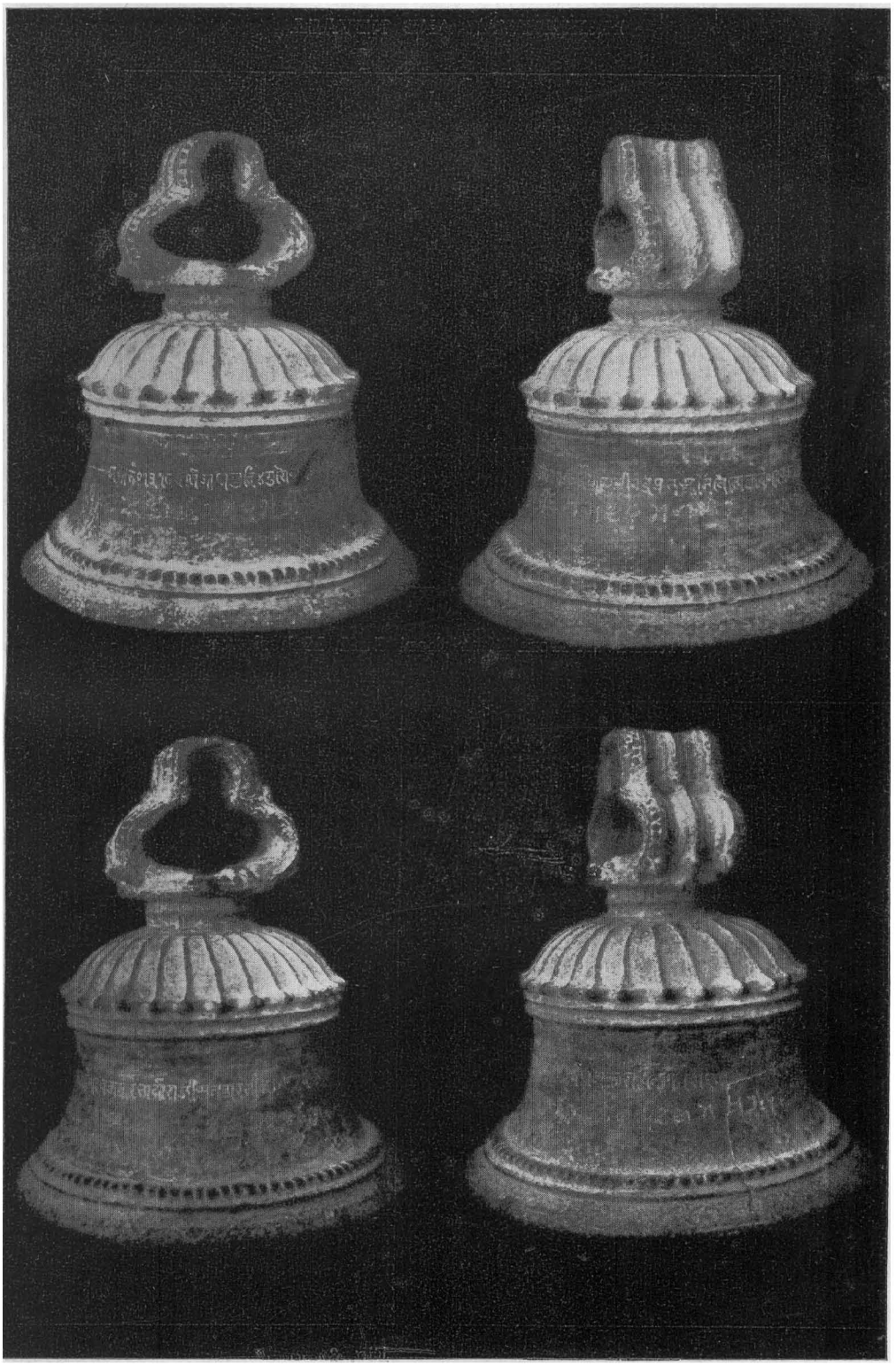
Even to-day we find simple ordinary articles of daily use satisfying in their artistic completeness, like the things of household and temple furniture—the elaborately worked out wooden bedstead, the swing with fancy brasschains, the water-jugs, highly ornamented pitchers, jars and the utensils for worship, the canopy, hangings on the wall or from the ceiling, brass lamp-trees and the like. These articles were beautiful and delicate pieces of art relegated to the everyday life of the people.

To come to the place of a bell in our everyday life :

A bell is a hollow metallic vessel used for making a more or less loud noise. Bells are usually cup-like in shape, and are constructed so as to give one fundamental note when struck. The term does not strictly include gongs, cymbals, metalplates, resonant bars of metal or wood, or tinkling ornaments, such as, e.g., "bells" like the common variety of cow-bells or bells on the belt worn by bullocks, camels or elephants. The main interest of bells has reference to church, temple or tower-bells.

The history of bells is full of romantic interest. In civilized times, they have been intimately associated, not only with all kinds of religious and social uses, but with almost every important historical event. Their influence upon architecture is not less remarkable, for to them indirectly we probably owe most of the famous towers in the world. Church-towers at first, perhaps, scarcely rose above the roof, being intended as lanterns for the admission of light, and addition to their height was in all likelihood suggested by the more common use of bells.

There are a few bells of world-wide renown, and several others more or less celebrated. The great bell at Moscow, "Tsar Kolokol" which according to the inscription was cast in 1733, was in the earth for 103 years and was raised by the Emperor Nicholas in 1836. The present bell seems never to have been actually hung or rung, having been cracked in the furnace; and it now stands on a raised platform in the middle of a square. It is



A 13th Century inscribed metal bell from Patan

Fig. 1
Prabhāvali from Bhartṛhari Gufā, Maheshwar

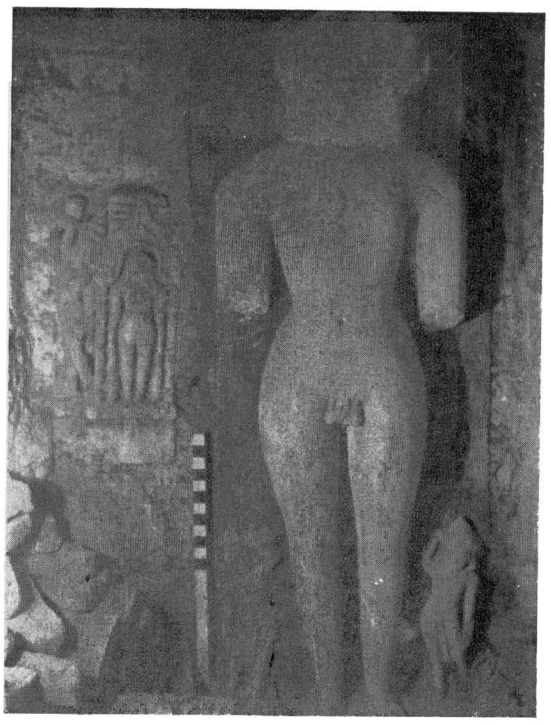


Fig. 2
Jaina Tīrthaṅkara in Kāyotsarga from
Bhartṛhari Gufā, Maheshwar

Fig. 3
Parsvanātha and another Tīrthaṅkara
from Nevāsā

Photos : Dr. H. D. Sankalia]

used as a chapel. It weighs about 180 tons, height 19 ft. 3 in., circumference 60 ft. 9 in., thickness 2 ft., weight of broken piece 11 tons. The second Moscow bell, the largest in the world in actual use, weighs 128 tons.

In a pagoda in Upper Burma hangs a bell 16 ft. in diameter, weighing about 80 tons. The great bell at Peking weighs 53 tons; Nanking, 22 tons; Olmutz, 17 tons; Vienna (1711), 17 tons; Notre Dame (1680), 17 tons; Paul's cathedral, 16¾ tons; Great Tom at Oxford, 7½ tons; Big Ben of the Westminster Clock Tower weighs 13½ tons; it was first cast by George Mears under the direction of the first Lord Grimthorpe in 1858.

These large bells are either not moved at all, or only slightly swung to enable the clapper to touch their side; in some cases they are struck by a hammer or beam from outside. The earliest bells known to the Western World were probably not cast, but made of plates rivetted together, like the bells of St. Gall or Belfast.

The bell-founder's art, originally practised in the monasteries, passed gradually into the hands of a professional class, by whom were gradually worked out the principles of construction, mixture of metals, lines and proportions. In England, some of the early founders were peripatetic artificers, who travelled about the country, setting up a temporary foundry to cast bells wherever they were wanted. In old church-wardens accounts are found notices of payments for casting of bells at places where no regular foundry is known to have existed.

Bell-metal is a mixture of copper and tin in the porportion of 4 to 1. The thickness of the bell's edge is about one-tenth of its diameter and its height is twelve times its thickness.

The names of bells were often stamped upon them in the casting; whence arose inscriptions upon church-bells. The character of the lettering, and the foundry-marks upon old bells, are of great assistance in determining their date.[1]

The chief centres of this art of metal-foundry in Gujarat were known to flourish in Sīhor (Saurāṣṭra), Visnagar (N. Gujarāt) and Ḍabhoi (Central Gujarat).

The earliest dated metal-bell from Gujarat is taken to be the one, found at Ajārā, one *krośa* from Ūnā (Saurāṣṭra) now a very small village, but formerly a big city adorned by a number of Jaina temples. The

1. For further information, see article on 'Bell' in *Encyclopaedia Brittanica*, Vol. III, p. 687-692.

bell under notice weighs 35 lbs. and is dated V. S. 1034. The inscription 'श्री अजारा पार्श्वनाथ सं १०३४। शा. रायचंद जेचंद।:' (Vide *Jaina Tīrtha Sarva-Saṅgraha* Vol. I., Pt. I., pp. 137, 138); it has, however, been looked upon with great suspicion about the digit for hundred in the date which very probably reads much later.

Dr. Vasudeva Sharana Agrawala, was kind enough to send me four photographic prints of the Pāṭāṇa temple-bell in June 1951 which bears an inscription.

The inscription as read from the four side-views of the bell gives the following information: The use of *Pṛṣṭha-mātrā* is noteworthy :—

(I) ७० सं १३१८ वार्ष माघ शु दि ४ गुारो वागड ाद्वथारो

(II) श्री चंद्रप्रभस्वामि चाचेत्य कुदुादवकुमार

(III) ———भार्या राजीसुत रसीहश्रावेद्यनाथ

(IV) Not legible.

The inscription records that this temple-bell was presented to the Caitya of Śrī Candraprabha Svāmi, situated in the Vāgaḍa district, in Saṁvat 1318 (1262 A.D.) on the fourth day of the bright half of the month of Māgha.

The height of this bell is 15 inches, outer diameter at the bottom is 13½ inches and it weighs 45 lbs.[2]

Later dated specimens of the 17th and 18th century bells have been known to be in existence at the summit of Dattātreya on Mt. Girnār and also on Mt. Abu.

The bell introduced through this note is the earliest dated specimen from Gujarat, beyond any doubt.

It is worthwhile to investigate into the earlier history of metal-casting in Gujarat as is in evidence from the Akoṭā hoard of bronzes, which probably is in a line with the "School of Ancient West" as noted by the Buddhist historian Tāranāth in 1609.

2. This detailed information is due to the courtesy of Dr. T. N. Rāmachandran, Deputy Director of Archaeology, New Delhi.