Hands On Learning
with Reading Museum Service

MUSICAL INSTRUMENTS OF THE WORLD G150B

Egyptian Tar Drum



Second to the human voice, percussion instruments are probably the oldest instruments known to humankind. The very first instrument may have been two pieces of wood or stone banged together to create a rhythm. A drum is the next step on from simply banging together two hard objects. The basic drum design - a hard tube, with its open ends covered by a skin - has remained unchanged for thousands of years.

The two drums in this box are a small sample of the many thousands of kinds of drum that have been made. Drums can have skins (called heads) at one or both ends of the wooden tube (shell) which acts as a resonating chamber, as is the case with the larger of these two examples. It is from Egypt, where it is known as a tar. A very similar Egyptian drum is called a bendir. It differs from the tar in having wires (snares) stretched across the inside of the skin so that the instrument produces a buzzing sound.

The tar is a frame drum, that is, it has a shell with a smaller depth than the diameter of the drumhead. There are two major types of frame drum: those without jingles, which can be played with the hands or with sticks; and those with jingles, which are played with the hands (tambourines). Tambourine jingles are usually round metal discs set into the frame, but they can also be pellet bells or brass rings attached to the inside of the frame. Frame drums are found in many cultures and have a long history. The earliest depictions of frame drums appear in Mesopotamian art from the third millennium BC. The Irish bodhrán, which became popular in Irish folk music in the 1960s, is very similar.



In Europe frame drums tend to be played with the left hand so that the drumhead faces up towards the sky, with the thumb touching the skin. Most of the playing is done with the right hand. In Asia and North Africa the player is usually shown with the left hand holding the instrument at the bottom with the skin facing away from him/her and the fingers of both hands playing. This grip allows the player to produce numerous sounds from the skin: for example, a low-pitched natural ringing sound produced by striking the drum off-centre; a high-pitched sound produced by striking the edge; a stopped stroke produced by slapping the instrument in the centre. In Arabic drumming, these three sounds are onomatopoeically known as *doum*, *tak*, and *kah*.

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African Drum



This small African drum comes from south of the Sahara - probably from the far south, as cylindrical drums with furry cowhide for decoration are typical of people who live in South Africa, such as the Zulu. Two examples of Zulu drums can be seen below.



This example was probably made to be sold as a souvenir. Working drums are usually bigger than this and are used to accompany dancing. They are often played resting on their side (right) and are beaten with sticks. As can be seen from the photographs, the large drums have the two heads fastened together with cords. These cords can be twisted and tightened to maintain the skin of the heads at the right tension to produce an attractive sound.



Damaru Hand Drum



Hand drums of this kind are used throughout the Indian subcontinent. A damaru proper is a small two-headed drum shaped like an hourglass. It is usually made of wood, with a leather drum head, although some are made out of a male and female skull (below). Such drums particularly the latter kind were used to summon or drive away demons in religious rituals. The strikers are usually two beads fastened on cords around the waist of the damaru. They are also used by Hindu holy men (sadhu) and Buddhist monks to create rhythms when chanting prayers or meditating. The photograph on the left shows a sadhu spinning one of these drums to create a rhythm. The rattle which the drum makes is said by some to represent the cosmic sound of Aum. In Hinduism such drums are particularly associated with the god Shiva. The photograph on the right shows Shiva holding one. Over time damaru drums with a handle, like this example, developed (which is missing one of its rattles). They are now often sold in the west as a child's toy.







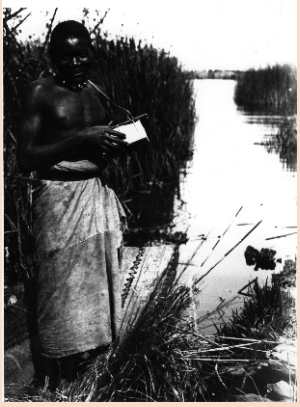
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Thumb Piano



This kind of instrument which consists of a staggered set of metal keys fastened to a resonator has a number of different names. In Europe it is known as a lamellaphone, but in Africa where it originates it has hundreds of different names. Some of the most well-known are mbira, sansa and kalimba.



Thumb pianos are made from an assortment of materials, such as wood, metal cans, coconut shells and, as in this case, dried gourds. The Museum of Reading has several old examples of this instrument which have been made using empty Huntley & Palmers biscuit tins in order to amplify the sound! The lady on the left is playing an instrument made from a such a tin. They also come in a great variety of sizes, shapes and types. In recent years the traditional acoustic form has seen the development of electrical versions (right).



African thumb pianos use different musical scales from those of European instruments. Also, tuning in Africa is regional, which means that a tuning from one particular area might not match exactly with a tuning from another area if the scale intervals were compared. Another difference between African and Western keyed instruments is in how the keys are arranged. A Western keyboard (as on the piano) is arranged from lowest pitches to highest from the left to the right. Most thumb pianos are arranged with the lowest key in the center, and the player alternately plucks right and left or vice versa (depending on how the keyboard has been set up) to ascend the scale.

The basic technique for playing the thumb piano involves plucking the keys with the fingertips and fingernails. Some techniques involve playing with the index, middle and ring fingers of each hand, as on the Nigerian *agidigbo* while the Cameroonian *mangambeu* makes use of all the fingers but no thumbs. Other techniques involve the use of the thumbs plucking down on the keys while the index fingers pluck up from beneath them, as on the *mbira dza vadzimu* from Zimbabwe. The material used for the keys varies - some are made from a heavier, stiffer metal that requires the player to have a longer thumbnail to play comfortably, while others may be of a softer, more flexible metal that makes plucking with the fingertip comfortable.

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Two Recorders

The bamboo recorder comes from Morocco and the wooden one from India. The photograph on the left shows a Berber from Morocco playing a similar instrument. Flutes, including pan pipes, make a sound when air is blown across the hole. Recorders have one end of the pipe fitted with a mouth piece called a fipple, through which the player blows. Fipple instruments have a long history - an Iron Age specimen, made from a sheep bone, is on display in Leeds City Museum.





Guenbri

This instrument, which is also from Morocco, is often called a guenbri (other names are guimbri, gimbri, gambre, gombri). It would originally have had three camel leather strings (one of the pegs to tighten these is missing). It is played by simultaneously plucking the strings with the index finger and drumming the front of the resonating chamber (also made of camel leather) with the middle finger and thumb. Small versions like this one appear to have been used as apprentice instruments, with the learner moving on to a larger one when skilled, but they are now often sold to tourists.





The use of a tortoise shell to form the back of the resonating chamber is usual with these smaller instruments. The use of such shells to make music has a long history. According to ancient Greek mythology, the young god Hermes created the lyre from the body of a large tortoise shell which he covered with animal hide and antelope horns. The illustration on the left shows a lyre made from a tortoise shell.