

March 2

* Strings ~~Fast~~ Instruments

sound Guitar Violin (piano)
 ↓ ↓
 Plucked Bowed

* Brass (Blowing air)

sound Trumpet Trombone
 ↓

* Woodwinds

Winds

Saxophone

Clarinet

Flute

↓
metal

Wood
Reed

↓
wood

no reed
/metal

* Percussion

Drums

Cymbals

"Pitched Metal"

(piano)

Sir
name
↓

* 1914 Hornbostel-Sachs system of Musical Instrument classification

* Idiophones "Percussion Instrument" in which the sound is made by the body of the Instrument vibrating
⇒ ^{Example)} Vibraphone (Tam Tam)

* Membranophone "Drum" sound is produced by the vibration of a tightly stretched membrane
Tom-Tom, Timpani

* Chordophones "stringed Instrument" produced by sound by means of a string(s) stretched from one point to another.

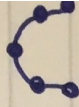
* Aerophones "wind instrument produce sound by using air as a principle vibrating factor.

* Bowed String Instruments (chordophones)
Er-hu Chinese ~~two~~ string "violin"

* Cranth

- uses a Drone which implies a single key

Cranth $\Rightarrow$ Flat Bridge $\Rightarrow$ Rebec

- Medieval Fiddle ^{stop}
has a curved bridge 



The violin

1690 - 1720

(The ~~stradivarius~~ stradivarius
Golden Period)

* Drone Instruments

- organistrum $\Rightarrow$ tuned to become Hurdy Gurdy
used to train monks to sing chant.

- Hurdy Gurdy

A mechanical stringed instrument which uses
a drone.

* Double Reeded Instruments

- Shawm → Oboe

considered "outside"
Instruments.

→ Bassoon

Wed
March 16

* Aerophones $\Rightarrow$ lip vibrating Instrument $\Rightarrow$ Natural Trumpet
(it has no valves or holes in the tube of air)
 $\downarrow$
Cornett

* Natural Trumpet

early 1700's, they used Baroque trumpet.

(Had a small number of holes in the tube player could fix pitches).

- valves added to Trumpet by 1800's.

* The overtones use natural or just intonation.

Quiz Question

Harry partch 1901-1974 Musician

He wrote a book as a young man "The sensitisation of Tone" 1867

- Hermann von Helmholtz.

- Studied Ancient Music (Greek)

- Developed his own system of scales and tuning, based on Ancient (Greek music) and Natural Intervals. (over tones)

* Timbre

↳ overtone content

* Hermann Van Helmholtz (1821 - 1894)

- 1863 - He wrote a book "On Sensations of Tone" as a physiological basis for the structure of music.

- He used chimes/tuning forks.  to demonstrate complexity of tone.

* Thaddeus Cahill (1867 - 1934)

- He read Hermann's book "on Sensation of tone".
- (1900) Telharmonium, the first synthesizer
 - weighted ~ 200 tons
 - pitch ~~sha~~ shafts up to 30 ft long