

Leonardo da Vinci (1452-1519)

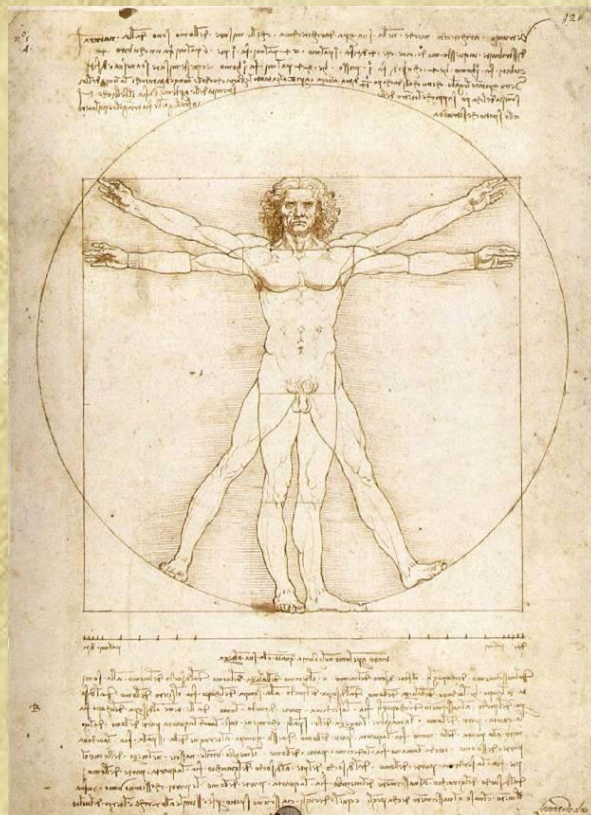


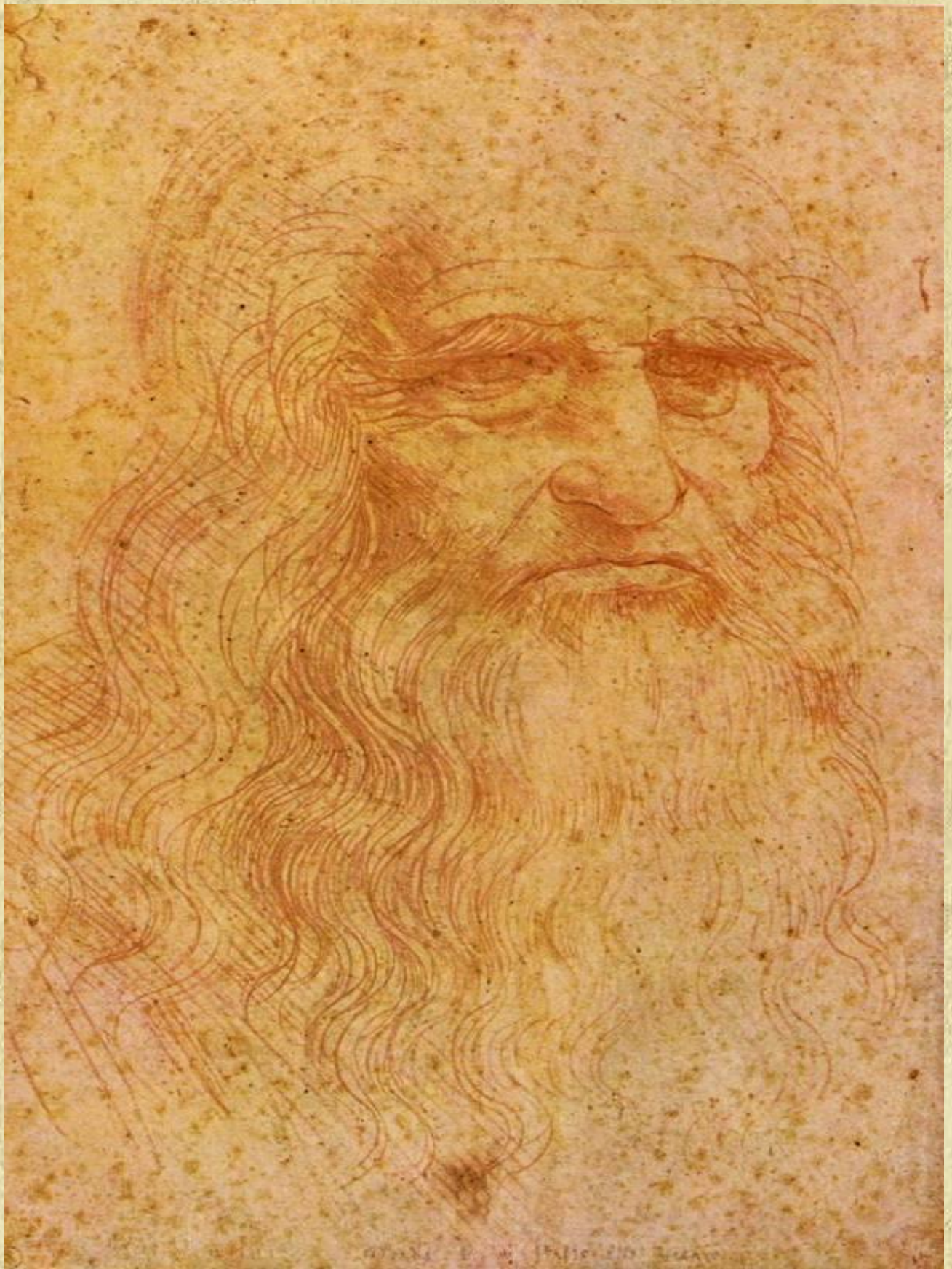
**Painter,
sculptor,
scientist ...**

Eletsкая Anastasya 11 "B"
Teacher: Tsenenko Elena
Vladimirovna
2013

Gun, scuba, tank, glider, car, helicopter, parachute ... If you try to continue this logical series, the educated person will certainly say, Leonardo da Vinci.

It is unlikely that in the history of the planet, there is one person that can be described the same number of adjectives: the inventor, artist, anatomist, musician, architect, sculptor, engineer, genius ... His inventions ahead of time for hundreds of years. His life is shrouded in mystery, but some work is still surprising.

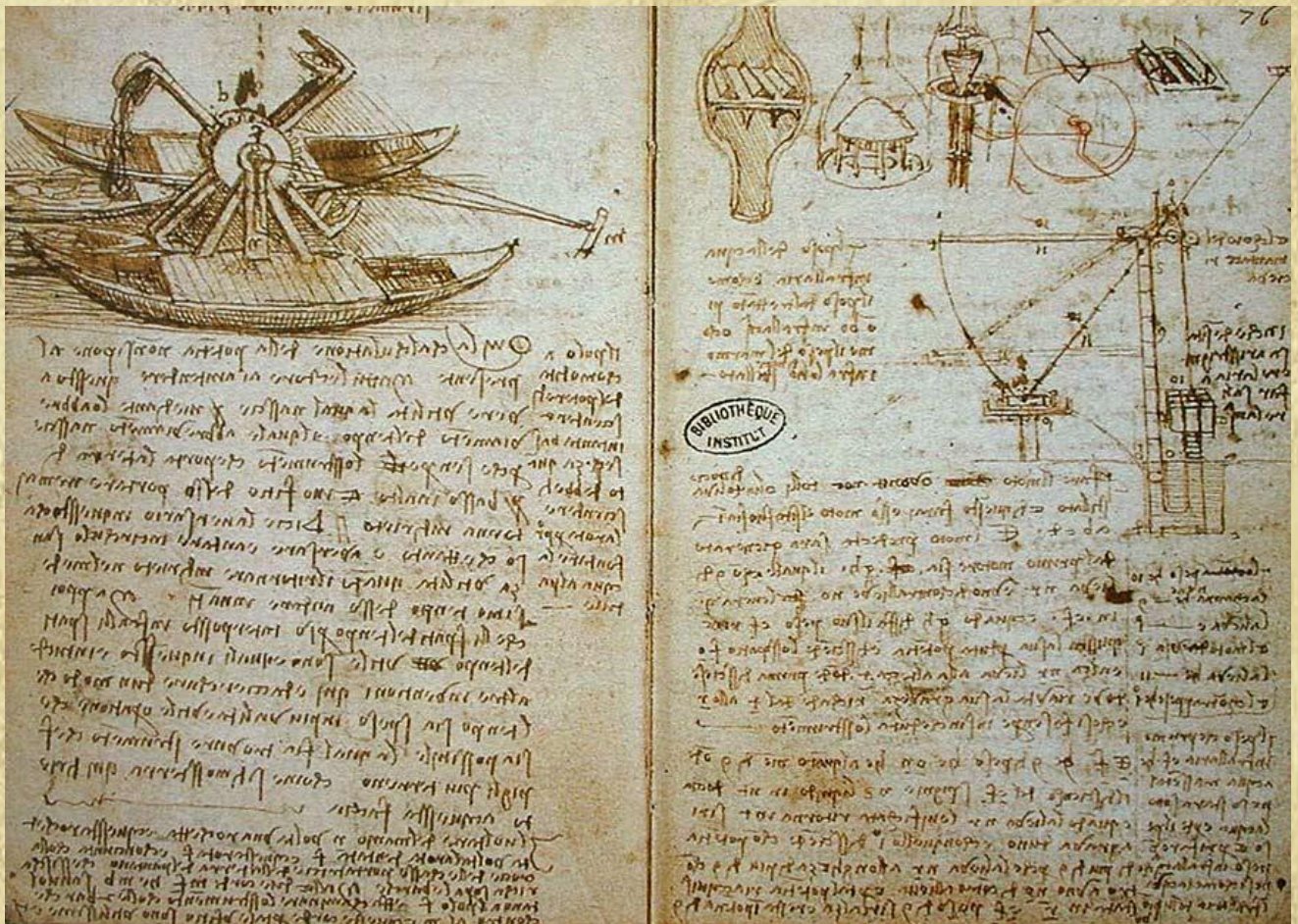




"Leonardo da Vinci's portrait of himself in his old age", 1514

- Leonardo da Vinci (1452-1519), Italian painter, sculptor, architect, scientist and engineer. The founder of the artistic culture of the High Renaissance, Leonardo da Vinci has developed as the master, studying with Andrea del Verrocchio in Florence. Ways of working in the studio of Verrocchio, where artistic practice is matched with technical experiments, as well as friendship with the astronomer P. Toscanelli encouraged the birth of the scientific interests of the young da Vinci. In his early works (the head of an angel in "Baptism" Verrocchio, after 1470, "The Annunciation", about 1474 - both in the Uffizi, the so-called "Benois Madonna", about 1478, The State Hermitage Museum, St. Petersburg), the artist, developing the traditions of the art of the Early Renaissance, emphasized the dimensions of forms smooth soft chiaroscuro, sometimes enlivened face barely perceptible smile, seeking her help with the transfer of thin mental states. Fixing the result of countless observations in sketches, sketches and field Study, performed in various techniques (Italian and silver pencils, sanguine, pen, etc.), Leonardo da Vinci sought, sometimes resorting to an almost grotesque caricature, the severity in the transfer of facial expression, and physical features of the human body and the movement of young people resulted in a perfect match with the spiritual atmosphere of the composition. In 1481 or 1482 Leonardo entered the service of the ruler of Milan, Ludovico Moro, acting military engineer, hydraulic engineering, the organizer of court holidays. Over 10 years, he worked on the equestrian monument to Francesco Sforza - father Lodovico Moro (clay model of a life-size monument destroyed during the capture of Milan by the French in 1500).

- Nothing gives such a bright view of the extraordinary versatility of the genius of Leonardo da Vinci, like many thousands of pages of his manuscripts. Contained in these notes in conjunction with countless drawings, giving thought Leonardo reification plastic, cover the whole of existence, all areas of knowledge, both as a strong indication of the opening of the world, which brought a renaissance. In these results, his relentless spiritual work clearly felt the diversity of life itself, in the knowledge that art and rationality in favor of Leonardo da Vinci in the indissoluble unity. As a scientist and engineer, he has enriched almost all the science of the time. Bright representative of a new, science-based experiment, Leonardo da Vinci gave special attention to the mechanics, seeing it as a master key to the mysteries of the universe, and his ingenious design guesses were far ahead of his time period (projects rolling mills, machines, submarines, aircraft). His collection of observations on the influence of transparent and translucent media on the color of objects led to the assertion in the art of the High Renaissance science-based principles of aerial perspective. Studying unit eyes, Leonardo da Vinci suggested correct guesses about the nature of binocular vision. In anatomical drawings, he laid the foundations of modern scientific illustration, also studied botany and biology. And as a contrast to this complete high-voltage creative activities - vital destiny Leonardo, his endless wanderings associated with the inability to find in the then Italian favorable working conditions. . Therefore, when the French king Francis I offered him a court painter, Leonardo da Vinci, accepted the invitation and in 1517 arrived in France



**The Library at Windsor Castle
kept the largest collection of
Leonardo's sketches and notes**

*LEONARDO DA
VINCI
INVENTIONS*

Ironically, only one invention da Vinci has been recognized in his lifetime - kolesovoy lock pistol, which the plant key. First, this mechanism is not very common, but by the middle of the XVI century, became popular among the nobility, especially in the cavalry that even affected the design of armor:

Maximilian armor for pistol shooting began to do with gloves instead of mittens. Kolesovoy lock for the gun, invented by Leonardo da Vinci, was so perfect that still occur in the XIX century.

But, as is often the case, the recognition of the geniuses of the century comes later: many of his inventions were expanded and modernized and is now used in everyday life.

For example, Leonardo da Vinci created a device that can compress the air and drives it through the pipes. In this invention, a very wide range of applications, from furnaces to incite ... ventilation of rooms.

Leonardo - not the first scientist who was interested in the possibility of man for a long time to be under water. For example, Leon Battista Alberti planned to raise some Roman ships from the bottom of Lake Nemi. Leonardo went on a simple plan: he created the project diving suit, which is made of waterproof leather.

He had to have a large chest pocket, which is filled with air to increase, facilitating the rise of the diver to the surface. Diver Leonardo was equipped with a flexible breathing tube that connected his helmet with a protective dome floating on the water surface (made preferably of cane with leather fittings).

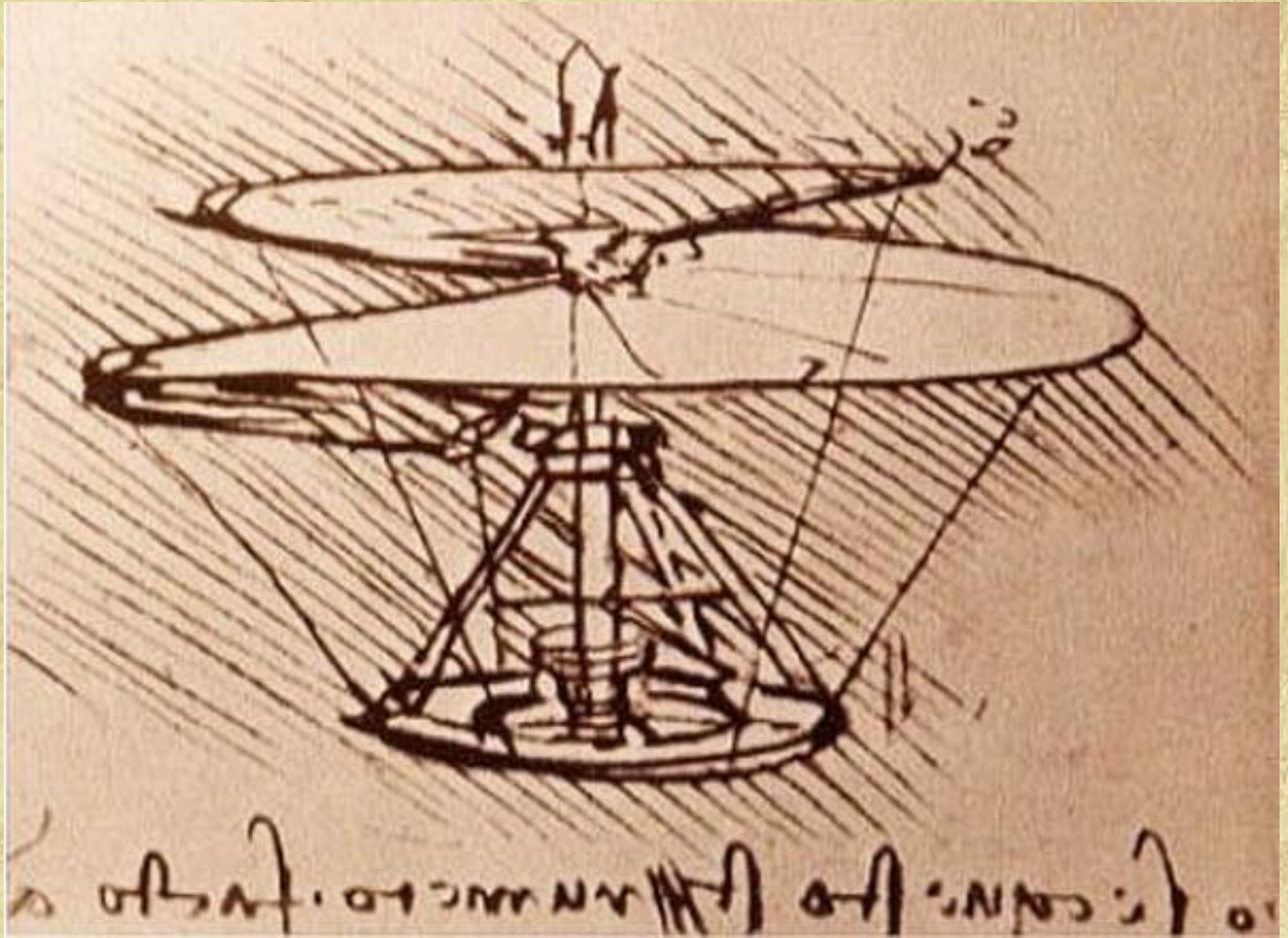
It is well known that Leonardo da Vinci's drawing also developed "ancestor" of the modern helicopter. The radius of the screw should be 4.8 meters on exercise plan he had a metal edging and linen finish. The screw was set in motion by people who walked around and pushing the levers. "I think that if the screw mechanism solidly made, that is, made of starched cloth (to avoid tearing) and rapidly promoted, then he will find support in the air and fly high in the air" - wrote the da Vinci in his works.

One of the most necessary things for human learning swimming - a lifeline. This invention Leonardo remained almost unchanged.

To speed up the swimming scientist has developed a scheme webbed gloves, which eventually turned into the well-known flippers.

Hard to believe, but to facilitate the labor of the workers came up with Leonardo ... excavators, which were soon used for lifting and transportation of excavated material than to dig itself. Scientists maintain that the excavators could be needed for the project lead of the Arno. It was supposed to dig a trench width of 18 m and a length of 6m.

Figures give an idea of the inventor of the machine size and the canal, which was to dig out. Crane booms with different length was interesting in that it could be used with multiple balances at two or more levels of excavation. Boom deployed at 180 ° and covered the entire width of the channel. Excavator mounted on rails and, as the work, moved forward by a screw mechanism at the central rail.



Aircraft



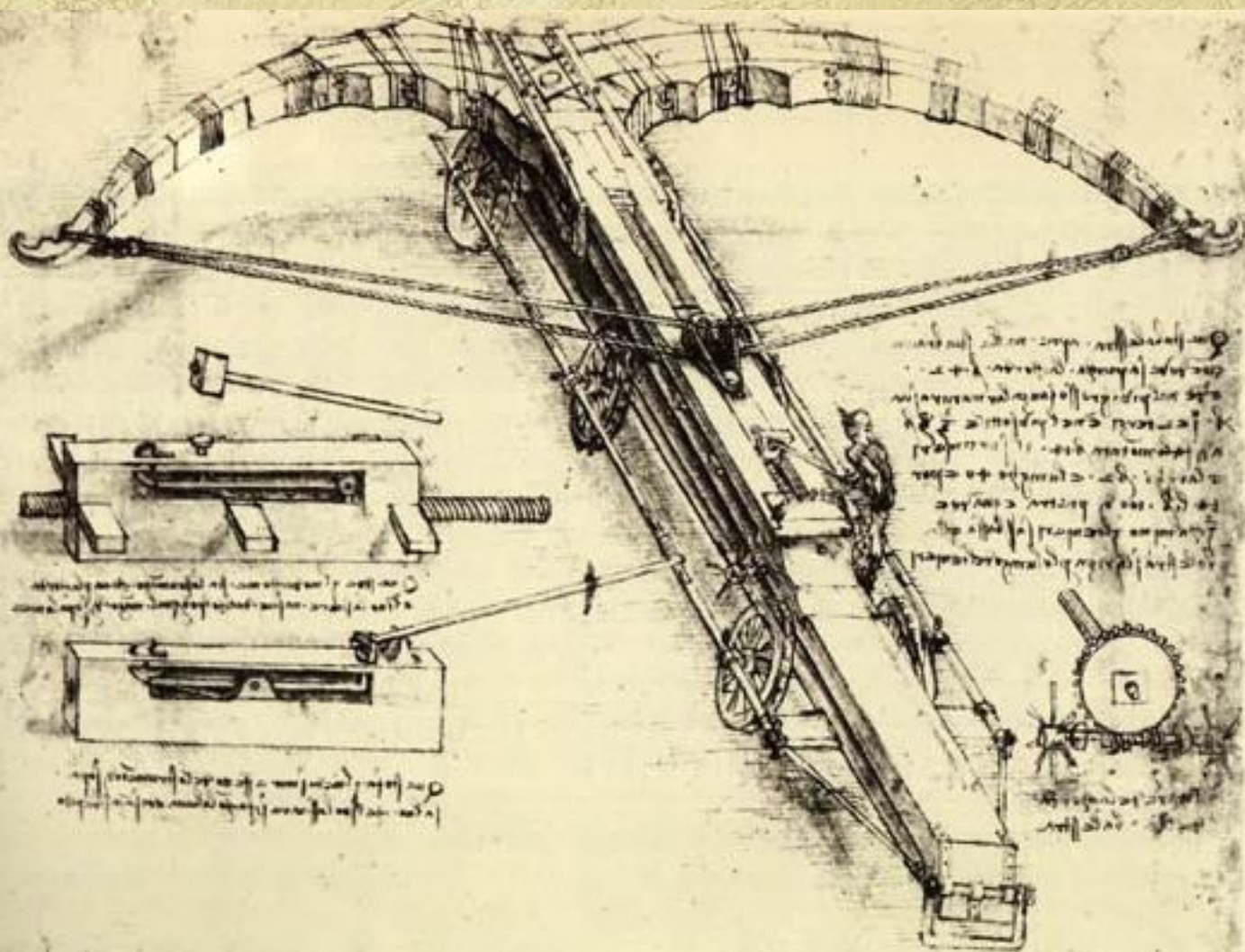
The original design of the parachute was drafted by Leonardo da Vinci in his notebook, and was accompanied by the safety record jump.

The invention of Leonardo received practical confirmation in 2000. Briton Adrian Nicholas decided to jump with a parachute (with a height of 3000 m.) The jump was successful.





Tank

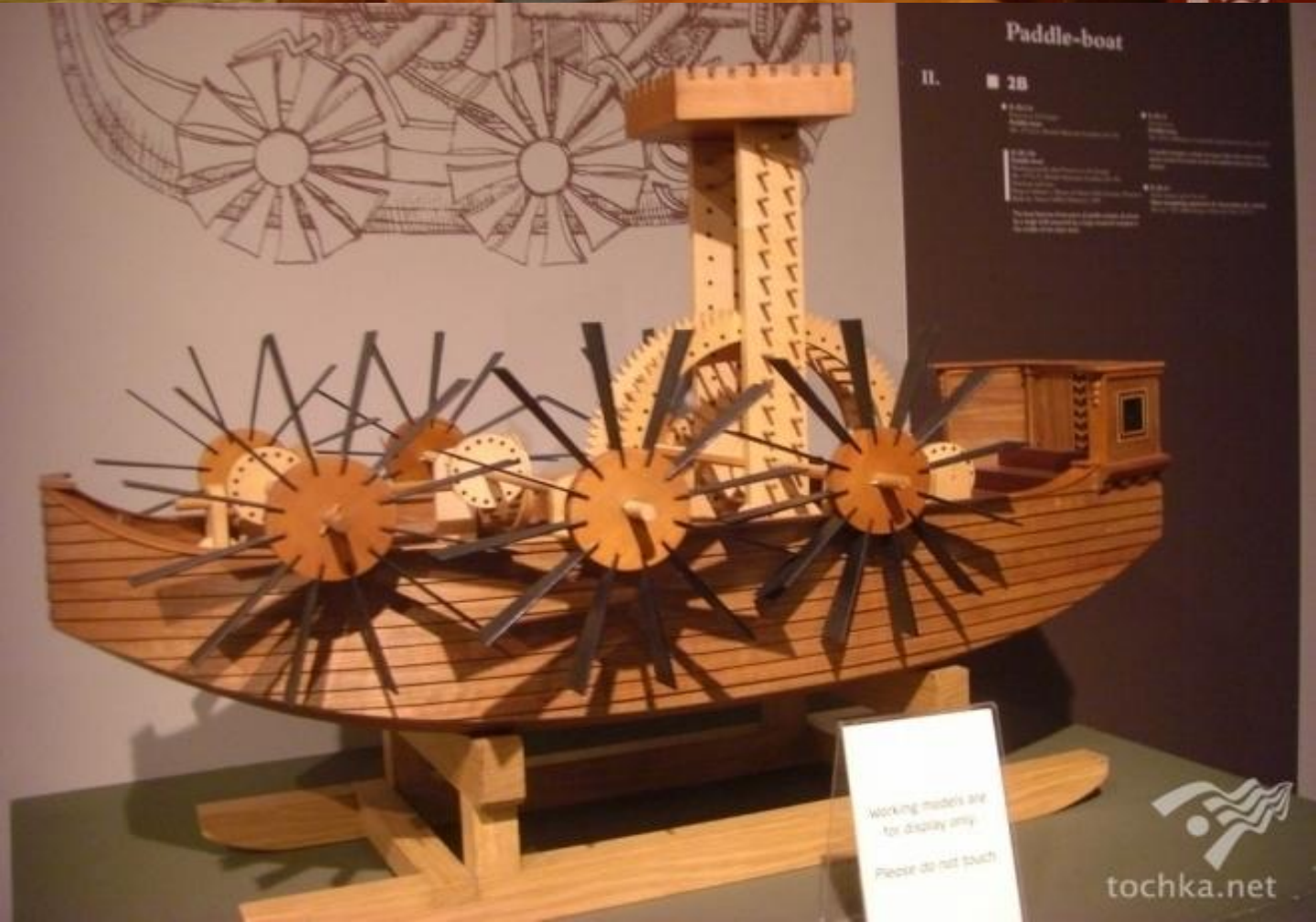


Crossbow

Origins neurosurgical anatomy in drawings and records Leonardo da Vinci

- To date we know of more than seven thousand pages of manuscripts and drawings belonging to Leonardo da Vinci. Leonardo was trying to organize their observations, noting that "... it will be messy collection, extracted from many sheets that I copied here, hoping then to distribute them in the order of the places, respectively mother, about whom they will treat ...". A motto of numerous diaries, and, in particular, the human anatomy, may be the one of his records, "Many will consider themselves entitled to reproach me, pointing out that my proofs are contrary to the authority of some men who are in great esteem, almost equal their immature judgment, they do not notice that my subjects were born out of pure and simple experience that is the true teacher. "
- In Florence, Leonardo's first visit to the dissecting room. Their anatomical opening of Leonardo da Vinci produced the hospital Santa Maria Nova, founded in 1255. When hospitals studied anatomy and other Florentine artists such as Michelangelo - at the hospital of the Holy Spirit.





Список литературы

1. Веццози, А. Леонардо да Винчи: Искусство и наука Вселенной / Алессандро Веццози; пер. с фр. Е. Мурашкинцевой. – М. : Астрель : АСТ, 2001. – 160 с. : ил.
2. Клиентов, А. Е. Леонардо: история о знаменитом живописце, скульпторе и архитекторе, и замечательном инженере, математике и анатоме / А. Е. Клиентов. – М. : Белый город, 2007. – 62 с. : ил. – (Исторический Роман).
3. Удивительная жизнь Леонардо да Винчи / авт. текста Н. Сидорина. – М. : Астрель : АСТ, 2002. – 79 с. : ил.
4. Уоллэйс, Р. Мир Леонардо. 1452-1519/ Роберт Уоллэйс; пер. с англ. М. Карасевой. – М. : ТЕРРА, 1997. – 192 с. : ил. – (Библиотека искусства).
5. Сказки да притчи от Леонардо да Винчи // Эскиз. – 2010. – № 7. – С. 6–7.
6. Эспинелл, Данн.
Леонардо Да Винчи. Я хочу сделать чудо [документальный фильм] / реж. С. Эспинелл, Т. Данн. - М. : СОЮЗ Видео, 2006. - (100 мин.) - (Великие мастера) (BBC. Коллекционное издание). - Вых. дан. ориг. фильма: Великобритания, BBC, 2003