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## DECISION AGAINST THE BELL TELEPHONE

## MONOPOLY.

On December 18 of the present year Judge Carpeu ter, of the United States Circuit Court, rendered his decision in the suit brought by the Federal government to annul the Berliner microphone patent. The judge on two grounds decides the patent void, and directs it to be delivered up to be canceled. This is a circuit court decision and is open to appeal, and the case, it is to be presumed, will be carried to the higher courts. But the decision is a good one, is very farreaching, and is the first circuit court defeat which the Bell Company has sustained for many a year.
The suit was brought by the United States through the Attorney-General's office, with Messrs. Causten Browne and Robert S. Taylor as additional counsel. The American Bell Telephone Company was represented by Mr. James J. Storrow and four other counsel. In the title Emil Berliner was joined with the telephone company as a defendant
The patent in suit is one granted to Emil Berliner on November 17. 1891, and is numbered 463,569. It describes and claims broadly the microphone transmitter of a telephone system. The original date of application was June 4, 1877. For over fourteen years the application was kept alive in the Patent Office by one action after another. Many reasons for delay were assigned, and finally the patent was issued a short time before the two fundamental Bell patents had expired.
For a long series of years the Bell patents had maintained for their owner, the American Bell Telephone Company, an absolute monopoly of the art of transmitting speech electrically, and many millions of dollars of dividends have been earned by this monopoly. The circuit court decisions had been so many and so strong in the patent's favor that any attack on it was hopeless. As the dates approached when the Bell patents were to lapse, a new patent was issued to Berliner, which if sustained would have practically extended the monopoly to 1908. It is a definite fact that the microphone is all that has made telephony a com. riercial success. The Berliner patent covered in its claims this device most completely.
A quantity of testimony was taken on both sides, and the case was pressed to a final hearing. There were three grounds of action practically, as embodied in the government's case One was the issue of patent in 1880 to Berliner for the same invention; another was the extraordinary delay in the granting of the patent. On both these grounds the judge decided in the government's favor and against the Bell Company. The other ground was the changes in the text, drawings and claims of the application while it was pending in the office. Of this the court takes no notice in the decision.

The 1880 Berliner patent just alluded to, while apparently intended to be for a microphone used in the role of receiver, something for which it is not well adapted, contained a claim for two microphones in circuit with each other, one as transmitter and the other as receiver. This enabled the court to find in it the transmitter of the patent in suit, and hence to
decide the patent in suit to be void, as two patents cannot be awarded for the same invention.
The delay in the issuing of the patent receives by far the most consideration in the decision. This was undoubtedly the main point in the case. The court finds that the microphone covered by the Berliner patent had been in use since 1878 by the Bell Company. From 1877, when the application was filed, to 1882, the application for the patent in suit had been regularly prosecuted, and the court finds no fault with the transactions of these five vears. About this time the delays which have vitiated the patent began. The case was withheld from issue to await the declaration of interferences. One of the Bell telephone cases, the Drawbaugh suit, came before the Supreme Court. This was made a ground by the Patent Office for more delay, in order to hare the decision of the court to guide its actions. This decision was given in 1888. Still a prospective interference with the same party was awaiting a public use proceeding in the office. Drawbaugh was thrown out on this, so that finally in 1891 the Commissioner decided that the patent should be issued. The threatened Drawbaugh interference had kept the patent from issue for years. Ordinarily a patentee feels aggrieved at delay, but here was a case where delay was of the utmost
value, provided the patent could be obtained and upheld. The Patent Office took upon itself judicial
the issue of a patent and the Commissioner is not to be a self-constituted judge.
We have repeatedly advocated in these columns the propriet $y$ and the importance of the liberal treatment of inventors by the Patent Office. The true function of the office should be the granting of patents, not the endeavoring to adjudicate as to the merits of an inention.
Were the system changed so that patents would be granted on application without all the examination for priority, originality, and even utility, that is now given the inventions claimed in the applications, the interests of the public would be conserved. There would be less desire for useless patents than now, when the squeezing of a patent through the Patent Office gives it, in the eyes of its owner at least, a sort of judicial force. The best attorneys would be required in the system, as the search for originality would be done outside of the Patent Office, and inventors would be careful not to waste their money on useleas letters patent.

## THE HEAVENS IN JANUARY.

There is something besides the planets and the constellations to interest star gazers during the coming month. In truth our good ship, the earth, as she cleaves the ethereal ocean is continually bringing into view some new sight for those who keep a sharp watch to larboard and to starboard. The astronomical outlooks, on November 1, spied a comet coming sunward. With that keen sense of recognition which enables a seaman to name an approaching vessel before is hull has fairly risen, they at once pronounced the stranger to be Encke's comet. It is in the constellation Pegasus, and on January 1 it will be three or four degrees south west of the star Theta in that constellation and will set a little before 10 o'clock in the evening By the middle of the month it will have passed into Aquarius and will be near the star Alpha Aquarii, and at the end of the month it will be close to the northern border of Capricornus, and will set before 6 P. M. It will be in perihelion on February 4. Encke's comet is rarely bright enough to be seen with the naked eye, and the interest it excites is due principally to the evi dence it gives of encountering some resistance in space Its period is a little less than three years and four months, but this period has been gradually shorten ing ever since the comet's discovery in 1818. Until 1868 it lost about two hours and a half on each circuit, but since then the rate of shortening has been re duced one-half. What causes the shortening of the period, and more particularly what caused the change in 1868, is more or less a mystery. A resistance to tine comet's motion would accelerate its return to peri helion by sending it closer to the sun, and thus com pelling it to quicken its pace; but the exact nature of the resistance remains to be discovered.
Mars and Jupiter continue to attract universal at ention. Mars has just crossed the line from Pisces into Aries and is on the meridian, at the beginning of he month. at 7 P. M. At the end of the month the planet, which is moving eastward, will be near the sta Pi Arictis, and will pass the meridian about 6 P . M.
Jupiter is in Gemini, immersed in the Milky Way, near the stars Mu and Eta, and the magnificent cluster M 35. It is a glorious neighborhood. He is noovng slowly, one might say majestically, westward, as if to meet Mars and complete the subjugation of the al ready humbled planet of war. About the end of the month he will cross over into Taurus. On the 1sthe passes the meridian about 11 P. M., and at the end o the month about 9 P. M. His wonderful disk has never appeared more splendid in the telescope than it does this winter. Whoever wishes to see a giant world n an early stage of its evolution should look at Jupi er. Here is answer for Keats' banished god crying, 'Where is another chaos? Where?"
As last month, I give again a few dates, in Eastern tandard time, on which the interesting phenomena of the transits of Jupiter's moons and their shadows may be witnessed with the aid of a three or four inch telesope.
On January 3, satellite III will enter on Jupiter's disk at 8:55 P. M., its shadow will follow at 10:10 P M. About 11:30 P. M., the shadow will be near the entral meridian of the planet. At about 9:38 P. M. satellite I will reappear from eclipse on the eastern ide of Jupiter.
On January 16, satellite II will enter on the disk at :37 P. M.; the shadow will follow at 8:50 P. M., and the latter will be near the central meridian about 9:40 P. M.
On January 25, satellite II will reappear from eclipse on the eastern side of Jupiter at 8:58 P. M. At 9:38 P. M. satellite I will enter on the disk. The 9:38 P. M. satellite I will enter on the disk. The
shadow will follow at $10: 26 \mathrm{P}$. M., and will reach the shadow will follow at 10:26 P. M.,
central meridian about 11:30 P. M.
The satellites crose the disk from east to west. Sat ellite I and its shadow pass near or upon the great south belt; the others pass farther to the south.
Neptune is in Taurus, nea; the star Iota. Only a very powerful telescope can show Neptune's satellite, and the most powerful fails to reveaı any distinctive

