

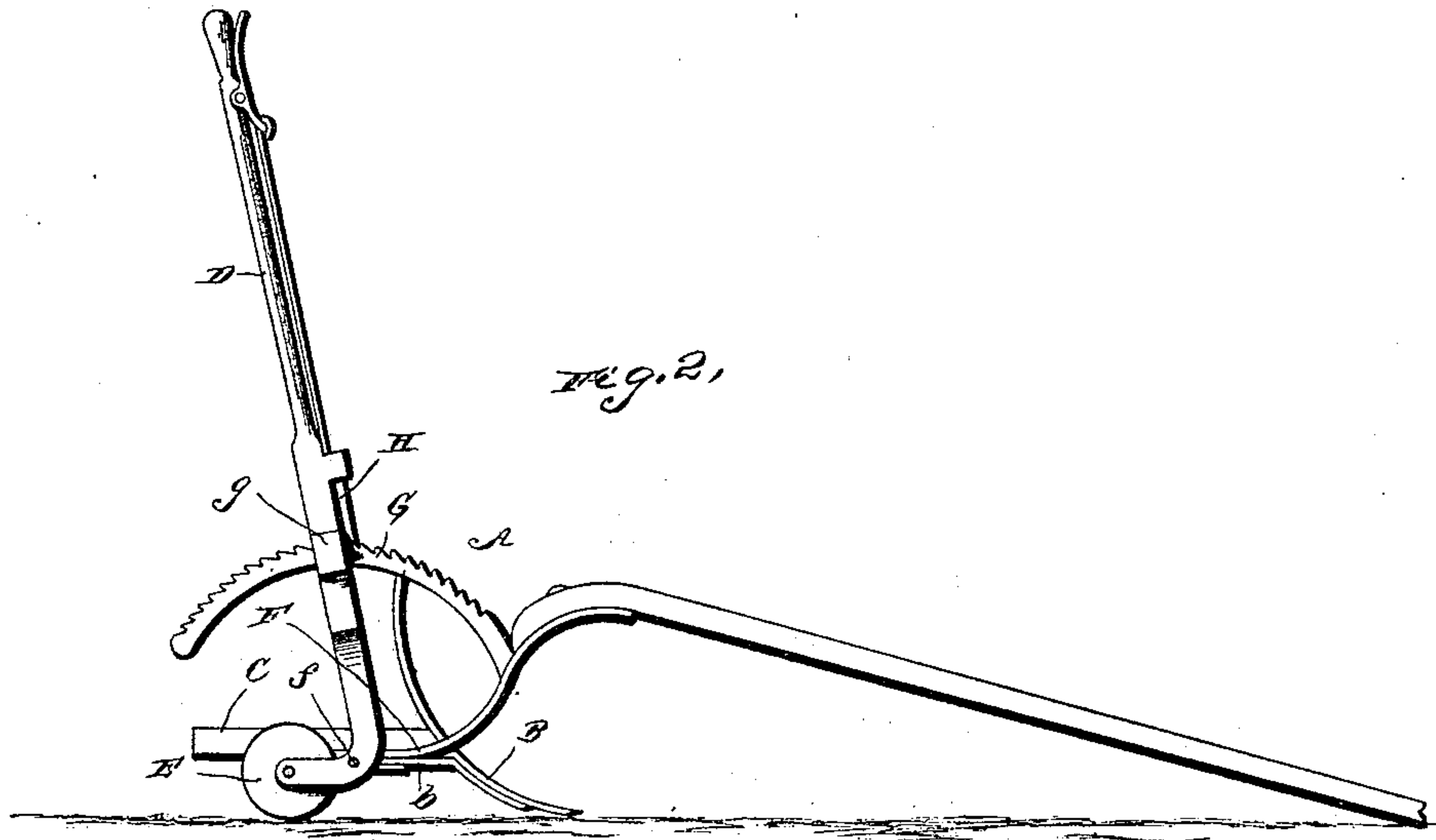
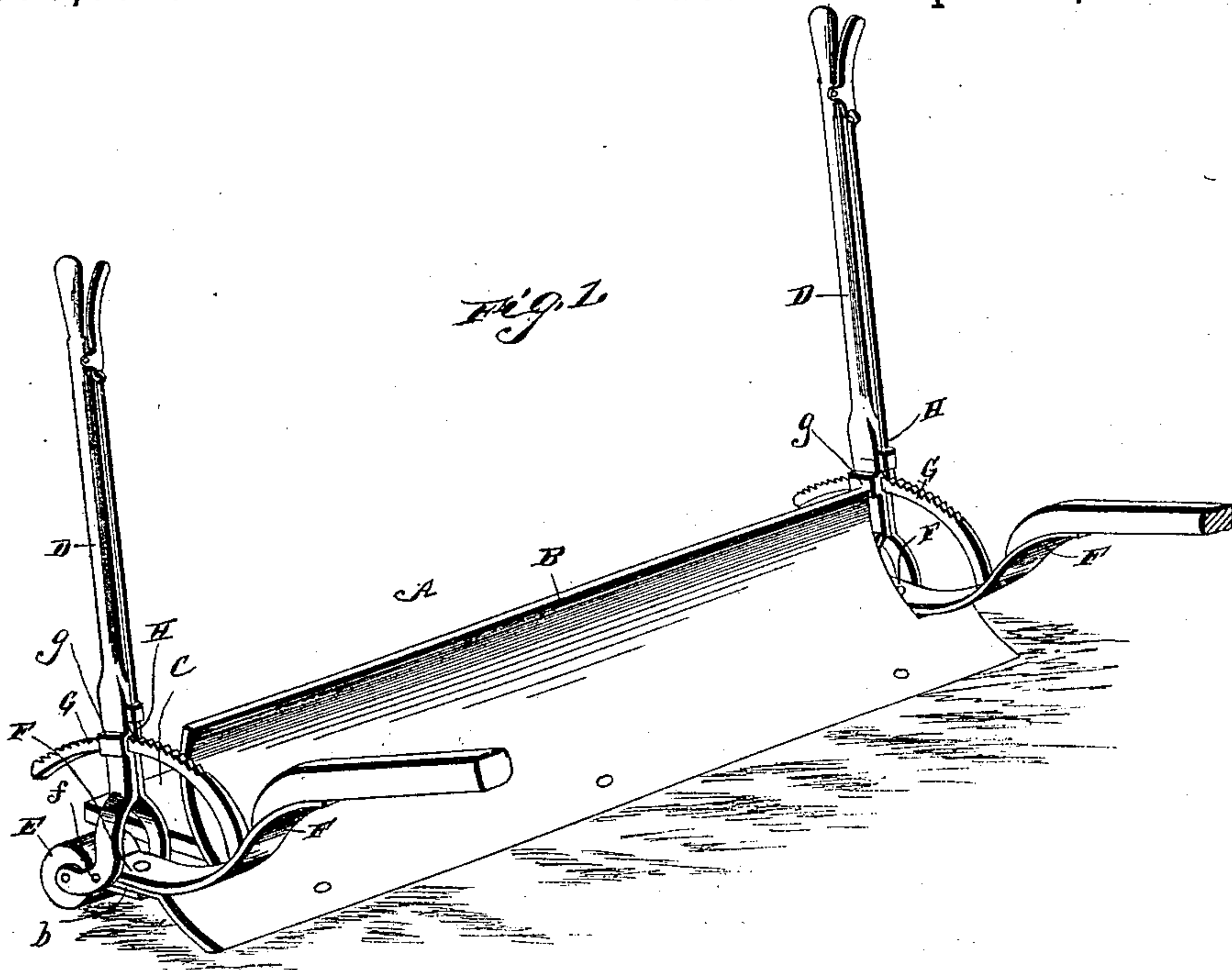
(No Model.)

C. J. MINARD.

EARTH SCRAPER OR LEVELER.

No. 370,077.

Patented Sept. 20, 1887.



Witnesses

C. B. Taylor

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UNITED STATES PATENT OFFICE.

CORNELIUS J. MINARD, OF MAQUON, ILLINOIS.

EARTH SCRAPER OR LEVELER.

SPECIFICATION forming part of Letters Patent No. 370,077, dated September 20, 1887.

Application filed June 16, 1887. Serial No. 241,548. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS J. MINARD, a citizen of the United States, residing at Maquon, in the county of Knox and State of Illinois, have invented a new and useful Improvement in Earth Scrapers or Levelers, of which the following is a specification.

My invention relates to improvements in earth scrapers or levelers; and it consists in a certain novel construction and arrangement of parts, fully set forth hereinafter, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of my scraper. Fig. 2 is a detail side view thereof.

Referring by letter to the drawings, A designates the body of the scraper, comprising the blade or cutter B and the foot-board or platform C for the driver, and the said cutter is provided at the sides with the rearwardly-extending ears *b b*.

D designates a lever bifurcated at the lower end and having the roller or caster E journaled in the said bifurcated end, and the said lever is pivoted some distance above the said caster on studs *f f*, which are formed on the sides of the rear end of the arched bar F, which is pivoted near the rear end on the ear *b*.

G designates a curved arm or segment which is secured to the bar F and passes through a sleeve, *g*, on the lever D, and the said sleeve is adapted to operate on the said curved arm when the lever is turned around on its pivot. The upper side of the arm G is provided with ratchet teeth, and H is a spring-pawl secured to and operating with the lever D, which is adapted to engage in the said ratchet-teeth to hold the lever at the proper angular adjustment.

It will be seen that by operating the levers D the cutter-blade will be either raised or lowered, and thus it is adjusted to the desired height.

The draft-beams or tongues are attached to the front ends of the arched bars F, and the driver stands on the platform C to direct the draft-animals and adjust the cutter, as described.

It will be seen that as the bar F is pivoted to the body of the cutter any desired sheer of the said cutter may be had by simply driving the horses attached to one of the tongues ahead of the others, and in case, by accident, one of the teams of horses does not pull as fast as the

other, or pulls irregularly, there will be no straining of the machine. As the rollers are in the rear of the cutter, as seen, they are on the level to which the road is being reduced, and consequently by adjusting the levers any desired amount of cut may be made.

In cutters or levelers where the supporting-wheels are on the sides of the machine any irregularities of the road will affect the depth of the cut of the cutter; but in my device, where the supporting-wheels are in rear of the cutter, or on the part of the road which has been cut down, the depth of the cut will be always the same, or, rather, the road in rear of the cutter will be regularly cut.

The parts of the device are very simple and the means of adjustment easily operated, and therefore the machine will be found of great utility and advantage.

Having thus described the construction, operation, and advantages of my invention, I claim—

1. A scraper or leveler having the body A, comprising the cutter B and the platform C, ears *b b* on the sides of the body, arched bars F, pivoted to the said ears, curved arms G, attached to the bars F and having ratchet-teeth on the upper side, levers pivoted to the rear ends of the bars F and bifurcated at the lower ends, rollers E, mounted in the said bifurcated ends, sleeves *g* to receive and operate on the said toothed arms, spring pawls H to engage normally in the ratchet-teeth on the said toothed arms, and the draft-beams or tongues secured to the said bars F, all constructed and arranged substantially as and for the purpose set forth.

2. A scraper or leveler comprising the cutter or blade B, having at each end the draft-bars F, the rollers or wheels E, and the elevating devices connected to the draft-bars to elevate the cutter B, as set forth.

3. A scraper comprising the straight blade or cutter B, the platform C in rear of the blade, the draft-bars F at each side of the blade and connected to the same, and the elevating devices connected to the draft-bars.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CORNELIUS J. MINARD.

Witnesses:

F. P. HURD,
ARTHUR MILLER.