Illustration and detail from the British patent of “creepers” for drawing the electric locomotive up a steep grade.

but that if the motion be in the opposite direction it will cause the rollers \( s, s, \) to approach each other, gripping the body between them.

9. This portion of the specification concerning the electromagnetic brake is similar to a U.S. application that Edison executed on 2 July 1880 (Case 222) that issued in 1881 as U.S. Pat. 248,430.

10. This paragraph and the remainder of the specification are similar to a U.S. application that Edison executed on 14 August 1880 (Case 246) that issued two years later as U.S. Pat. 263,132.

–1988–

Notebook Entry: Electric Lighting


[Menlo Park, September 14, 1880]

Boss Socket

Illustration and detail from the British patent of “creepers” for drawing the electric locomotive up a steep grade.
In his journal entry of this date Charles Mott wrote “Johnson sketched a new socket which is designated as ‘Boss socket’ in Book No. 153 pge 18 etc which is now being made by one of the new men in Shop.”

Edward Johnson had arrived back in New York at the end of August and first came to the laboratory on the 31st. On 6 September he was again at the laboratory when Edison “made sketches of a number of styles and ways of running and concealing wires on gas chandeliers Some devices being fitted to permit of the use of either Electric or Gas Light without interference with each other”; these sketches have not been found. On the 10th “Johnson produced a six light chandelier on which to experiment in artistically fitting with connections, wires &c for substituting the electric lamp and to arrange for use of both or either without little change or disfiguring as possible” (Mott Journal N-80-07-10:130, 107, 116, 125, Lab. [TAEM 37:367, 355, 360, 364; TAED N117: 65, 53, 58, 62]; Josiah Reiff to TAE, 28 Aug. 1880, DF [TAEM 53:207; TAED D8004ZET]). Johnson seems to have headed the development work on sockets and other fixtures, which were subsequently manufactured by Bergmann & Co., in which both Johnson and Edison were partners with Sigmund Bergmann (see their agreement dated April 1880, DF [TAEM 57:7; TAED D8161C] and Bergmann & Co. catalog, n.d., PPC [TAEM 96:185; TAED CA002C]). For the subsequent work on sockets and fixtures see the notebook kept by Johnson (N-80-09-11, Lab. [TAEM 39:245; TAED N153]; see also Mott Journal N-80-07-10:174, 188, 208, 223, 249, 255, 276–77; N-80-10-25:33–35; both Lab. [TAEM 37:389, 396, 406, 414, 427, 439, 440–41; 34:168–70; TAED N117:87, 94, 104, 112, 125, 128, 138–39, N060:33–35]; Johnson to Mitchell & Vance, 20 Sept. 1880; Charles Batchelor to George Merril, 19 Oct. 1880, Lbk. 6:415, 475 [TAEM 80:308, 393; TAED LB006415, LB006475]).

Edison filed four patent applications on sockets and fixtures in March–September 1880.
the following September (U.S. Pats. 248,420, 248,424, 251,553, 251,554, 251,596, 256,701).

2. This drawing and the one on the preceding page are the first extant evidence for a screw socket. In his reminiscences Wilson Howell describes its origins:

Mr. Edison and a number of his helpers were grouped under a hanging lamp in the laboratory one evening. Edison was talking of the introduction of his light into homes, factories, stores, and of the necessity of making the system “fool proof.” Pointing to the lamp overhead hanging by its two wires from the open conductors, he explained to us how dangerous such a method of attachment would prove in the hands of the public. He explained that it was necessary to devise an attachment which would be secure, “fool proof,” insulated and quick. He described what was needed in such vivid language that one who listened attentively to Mr. Edison was given a picture of the device needed. The “picture” was that of another and older lamp attached to its source of supply—a kerosene lamp “burner” attached to its fount by a screw thread. A sketch was hastily made of this “socket” and, when shown to Mr. Edison was pronounced by him to be exactly the device he (Mr. Edison) had in mind. [Wilson Howell reminiscences, pp. 6–7, Pioneers Bio.]

--1898--

From George Gouraud

Dear Edison,

Edison Telephone Coy of London. There was an Extraordinary meeting of the shareholders held a few days since at the instigation of a number of shareholders who desire to divide the United Company shares and liquidate the Coy to save otherwise unnecessary expense. This thing has worked out just as I expected. The shareholders want the division and do not see any reason to pay Directors simply to speculate with United Coy shares. seeing the temper of the Shareholders the Board decided, evidently with considerable reluctance, to fall in with the spirit of the movement rather than oppose it and so the meeting came off quite amicably and resulted in unanimous resolutions being instructing the Board to negotiate with the Trustee of the Edison Reversion with a view to arriving at a basis of settlement and requiring the Board to report the result at an Extraordinary General Meeting to be held prior to the Ordinary general meeting for the year.

In Mr Renshaws absence the negotiations have been opened with me and I was yesterday informed that a written proposal would be made me in the course of a day or so.

Numerous speeches were made at the meeting and I was