ruption and other derelictions of duty on the part of police officers; the defendant was likewise a police officer; and the sergeant, on making the search and seizure, informed the defendant that he was acting in pursuance of his regular duties. These facts were relied upon by the Government in both the trial and the appellate court. In the *Greenberg* and *Katz* cases the situation was wholly different. The Court of Appeals, failing to note the difference, treated its decision in the *Schroeder* case as controlling, and did not give adequate consideration to the peculiar relation borne in New York, then as now, by state officers to federal prohibition enforcement, although the point was made by the defendant and a decision thereon was urgently sought by the United States Attorney.

The record in the case at bar does not show that the relation between the state troopers and the federal agencies for prohibition enforcement was called by counsel to the attention of the court. But as the conviction of these defendants rests wholly upon evidence obtained by invasion of their constitutional rights, we are of opinion that the judgment should be reversed and the case remanded for further proceedings. Compare *Wiborg* v. *United States,* 163 U. S. 632, 658–660; *Clyatt* v. *United States,* 197 U. S. 207, 221–222.

Reversed.

TEMCO ELECTRIC MOTOR COMPANY *v.* APCO MANUFACTURING COMPANY.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE FIFTH CIRCUIT.

No. 37. Argued October 18, 1927.—Decided January 3, 1928.

1. Large public demand for, and commercial success of, a patented article is evidence of invention. P. 324.
2. The specifications and drawings of a patent may be referred to as an aid in construing a claim. P. 330.

3. A claim in a patent should be construed liberally, so as to uphold and not destroy the right of the inventor. P. 330.
4. An improver who appropriates, without license, the basic patent of another, is an infringer and suable as such. P. 328.
5. Patentee who applied for a second patent as an improvement "over" the first, characterizing the new device as different in mechanical construction and functional results, *held* not estopped to insist on the old invention as against one who secured patent to the improvement through interference proceedings. P. 328.
6. The Thompson patent, No. 1,072,791, issued September 9, 1913, for a shock-absorber attachable to motor cars which have their leaf springs above and along their axles and attached at the middle to the car body above and at the ends to the axles near the wheels, is valid, including claim No. 3, and is infringed by defendant's device, made under patent No. 1,279,035, granted to Storrie, September 17, 1918. P. 326.

   The Thompson patent is for a combination of old elements, consisting (1) of a spiral spring, resting upon and in part guided by (2) a stanchion, attached to the top of the axle near the wheel; (3) a hanger bearing on the top of the spiral spring, in one form encasing it, in another passing through it, capable of moving up and down with the spring and attached below to (6) a link attached in turn to (7) the end of the leaf spring. The gist of the invention (besides its peculiar application as a separable part to the Ford car) is in the arrangement of its parts, so that all shocks and vibrations from the wheels are imparted first to the spiral springs before reaching the leaf springs, and thus are the more effectively absorbed or dampened due to the different responses of the two kinds of springs.
7. The radius link employed in the Storrie patent is a mere improvement on the Thompson combination. P. 325.

11 F. (2d) 109, reversed.

CERTIORARI, 271 U. S. 653, to a decree of the Circuit Court of Appeals which reversed a decree of the District Court sustaining, on three claims, the above named petitioner's patent in its suit for infringement. Another of the patent claims, No. 3, was held void by the District Court, a ruling which was sustained by the court below on petitioner's cross appeal.

Messrs. H. A. Toulmin and *H. A. Toulmin, Jr.,* with whom *Messrs. J. J. Spalding, H. MacDougald* and *J. A. Sibley* were on the brief, for petitioner.

Mr. Clifford L. Anderson, with whom *Messrs. James A. Branch* and *Moseley A. Keller* were on the brief, for respondent.

Mr. Chief Justice Taft delivered the opinion of the Court.

The Temco Electric Company, a corporation of the State of Ohio, filed this bill in equity against the Apco Manufacturing Company, a corporation of the State of Rhode Island, charging that the Apco Company had wronged the Temco Company by infringement of a patent for a shock absorber fitted for a Ford motor car, issued to Ralph P. and Wm. S. Thompson, assignors of one-third to Oliver P. Edwards, and assigned by them to the Temco Company and owned by it. The Apco Company answered denying the validity of the patent and its infringement, averring that it was inoperative and that the shock absorber which the Apco Company was making was made under a patent to one William Storrie, applied for March 18th, granted September 17, 1918, and numbered 1,279,035. The answer further set out the names of certain patents which were said to be anticipations of the patent upon which the suit was brought.

The district court held that the patent was a very narrow patent, and that claim No. 3 was invalid because it lacked words of description enough to make it operative. Deferring, however, to the decision of the district judges and of the Circuit Court of Appeals of the Sixth Circuit, it sustained three other claims of the patent but declined to grant a preliminary injunction. Though of opinion that the infringement had not been shown, nevertheless it en-

tered a decree in favor of the appellee out of deference to two decisions of the Circuit Court of Appeals, *K-W Ignition Company* v. *Temco Electric Motor Company*, 243 Fed. 588, and the same case reported again in 283 Fed. 873. The Circuit Court of Appeals of the Fifth Circuit declined to follow the two decisions, of the Circuit Court of Appeals of the Sixth Circuit, and reversed the judgment of the district court. There had been a cross appeal brought by the appellee to reverse the district court in its holding that the third claim was invalid, and that cross appeal was denied, 11 Fed. (2d) 109. The case has been brought here by certiorari. 271 U. S. 653.

The patent sued on was issued to Ralph P. Thompson and William S. Thompson, of Leipsic, Ohio, assignors of one-third to Oliver P. Edwards, of Leipsic, Ohio. The application was filed October 10, 1912, and the patent was issued September 9, 1913, and numbered 1,072,791, and has since been assigned by the patentees to the Temco Company. The object of the patentees was to provide a shock absorber which would make riding in an automobile easy. They professed to accomplish this by supplying a set of quick-acting coiled springs in connection with the set of slow-acting and friction-retarded leaf springs originally built into the vehicle. The compression and recoil of the two sets of springs occurred at different times, in consequence of which their respective pulsations were not synchronous. The result was said, in the specifications, to be that the shock to the road wheel and axle was first absorbed by the coiled spring, and therefrom was transmitted to the body of the car and to the occupants through the slow-acting leaf spring. As the compression and recoil of the leaf spring were not the same as those of the coiled spring, the recoil of the coiled spring began to take place before the full effect of the shock to the road wheel could be transmitted through the leaf spring. This see-sawing action, as it were, between the quick-acting coiled spring

and the slow-acting leaf spring, the specifications said, caused a large portion of the effect from vibrations to be nullified by the action of one and reaction of the other of these springs taking place simultaneously, thus absorbing within the spring element the sharper vibrations. The device was intended to be specially adapted for attachment to Ford automobiles. Its availability was claimed to be such that the owner of a Ford car, without the services of a mechanic and without disturbing the operation or construction of the car, might, with slight instruction, remove the usual hanger which supported each end of each leaf spring and insert in its stead the plaintiff's attachment.

The absorber consisted of an upright metal guide, whose lower end was rigidly attached to the car axle, and provided a platform for the lower end of a coiled or torsion spring, inclosed in a cylindrical metal casing or hanger, bearing against and supported by the upper end of the coiled spring, and so capable of upward and downward sliding movement on the guides, the stanchions or guides being adapted to maintain the vertical direction of the sliding movement of the absorber or torsional spring, and to limit the end movements of the leaf springs along the axle.

When the patent was issued there was a great demand to purchase the device and use it, and under the patentees, or under the K-W Ignition Company, which had a contract with the patentees, there were made and sold upwards of 134,000 sets of the shock absorbers, and about $2,250,000 was from time to time paid to the patentees for these absorbers, so that from 1912 for ten years or more a very large business was done in the sale and use of the patented device. There was litigation over it, especially in the districts of the Sixth Circuit, where the validity of the patent was generally sustained, the first case having been heard by a former Justice of this Court while a dis-

trict judge of the Northern District of Ohio. His opinion is recorded in the record. The case involved not only the validity of the patent, which after some hesitation he sustained because of its general adoption and success, but also presented a question whether the defendants in that case, the K-W Ignition Company, were not so bound by contract with the patentees as to estop them from defending against the patent. The district judge held, however, that the contract had expired and the obligations growing out of it had also expired, so that the issue tried was that of the validity of the patent. The district court's decree was affirmed by the Court of Appeals and the case was sent back for an accounting, and an accounting was had against the defendant in that case and a judgment given for $292,938 against the K-W Ignition Company, which was a defendant there. In the present suit the bill set up this litigation in Ohio as evidence of the validity of the patent, but a straight issue of validity was also made and all the defenses known were advanced.

The district judge in Ohio in the *K-W Ignition* case was affected in his decision, that the Thompson patent involved invention, by the way in which the public eagerly took it and its marked success, and so, indeed, was the Circuit Court of Appeals of the Sixth Circuit. So are we.

The attack now made upon the patent is that it has been proved to be ineffective by ten years' actual use, some injuries to the shock absorbers resulting from striking of the parts of the motor machine against the metal guides and cylindrical metal hangers in which the torsional spring is moved up and down. It appears that the real owners of the patent, realizing that there were defects in the operation of the absorber that should be remedied, applied to the Patent Office for a patent which should substitute for the stanchions or guides, on which the hanger around the torsional spring moved up and down in a vertical direction, a fixed radius link. The torsional spring of the

patent enclosed within the casing or hanger attached to the upright guide did not, in moving or sliding up and down, retain a vertical direction but was sometimes tilted over by the weight of the car and its load. The change proposed, in regard to this, was that while the spring should be placed outside the upright or stanchion at the bottom of the spring, the upright stem or guide or stanchion inside the spring should be maintained in a vertical position by the addition of a radius link united to another by a toggle joint which fixed the guide rigidly and would hold the coil spring up permanently in a vertical position. This permitted a widening of the coil spring at the bottom so as to make it conical and gave the spring more stability in its vertical position. The difference between a conical coil spring and one that is not conical does not make the two structures different in any respect but in degree of stability only.

The proposal of the plaintiff patentees to remove a defect by the substitution of the radius link for the metal guide and casing and hanger led to an interference proceeding with one William Storrie who claimed to have hit upon this change first, and in that interference proceeding in the Patent Office, Storrie was given a patent for the absorber with that radius link. Except for the radius link there is no difference in operation and result. The springs in a Ford car equipped with the defendant's device receive the shocks in the same order, operate in the same manner and produce the same results as those in a Ford car on which the springs of the plaintiff's patent are used. The function which the casing of the torsional spring and the hanger perform is exactly the same as that of the torsional spring and the radius link introduced in the Storrie patent under which the answer and the facts show the defendant's device was licensed and operates.

Storrie as patentee said in his specifications that his invention related to means for absorbing the vibrations

and shocks in vehicle springs to such an extent as not to cause annoyance to the rider and strain to the springs of the vehicle, which would tend to cause such springs to crack or otherwise become disabled; that the invention provided a shock absorber embodying an expansible helical spring and supporting means therefor of novel formation, one of such supports being secured to the axle and the other being shackled or otherwise attached to the vehicle spring, the parts being arranged to control the vibrations or shocks not taken up quick enough by the main spring and thereby overcome the objectionable features therein mentioned. And then follow twelve different claims, most of which refer to a radius link pivoted to the support between the torsional spring and the main or laminated spring of the vehicle.

The claim made for the invention is that the real gist of it is in the arrangement of the parts, all of which were old, so that the first vibration and shock would be taken up from the axle by the torsional spring, and then, having been divided up into vibrations, would be communicated through the torsional spring and the absorber to the leaf spring and "dampened down," as the expression is, by its slower action, so as really to take up and absorb and make to disappear the shocks otherwise directly communicated from the road and the axle to the leaf spring. It is argued that, as these were all old parts, there was nothing new in the patent. We have examined the art with a view to considering that particular point. We think that the theory, that the Thompson patent had and has its real value in the function of the torsional spring directly to take up all the vibrations from the road and axle and quickly to divide them for the dampening effect of the slow moving leaf spring of the car, was a sound one. There have been citations of early patents showing previous attempts of the same kind, but we have not been pointed to one in which the torsional spring was so

arranged as to take all the road vibrations and divide them up before reaching the main car spring, except those which have come after the Thompson original patent. This is true of the Bussing, whether German, English or French patents, the Peugeot patent and the Cosset patent. It is true that by taking some of these structures or devices, notably the Bussing English patent, it may be possible to show how, by turning over on its back the specified device, the torsional spring could be made partly and ineffectively to perform this function, but as described in this or other cited patents there is no suggestion or recommendation of the arrangement in Thompsons'. They—all of them—use the main or leaf spring to take directly all or part of the vibrations from the axle and rely on the torsional spring to soften vibrations after they have passed or are passing through the main spring. The leaf spring in the Warner patent not only takes the greater road shocks directly but the entire spring arrangement is primarily built and put in at the factory while the axle is split into two parts, and the device is not made a separate or separable part, a feature which is an important and needed advantage to adapt the absorber to use in a Ford car.

We may properly note, as bearing upon the issue whether there was something substantial in the elaborated claim of the Thompson specifications, that the defendant below called as a witness Mr. Storrie and that upon cross examination he said that the defendant's device was within the Storrie patent, and he made it clear that without the torsional spring to divide and neutralize the vibrations from the axle and ground, the good effect of the leaf spring to "dampen out" the vibrations from the road could not be gained.

With respect to the Storrie patent, it is said that the patent in suit is not broad enough to justify an allowance of equivalents which would make the radius link an equivalent to the casing and hanger of the Thompson absorber.

It is urged that if it is not an equivalent, it is at least an improvement on the Thompson patent in suit and that this is what Thompson was seeking when the interference proceedings were had. It was upon that theory, that the Storrie patent was an improvement on the Thompson patent, that the Circuit Court of Appeals of the Sixth Circuit in the suit between the Temco Company and the K. W. Ignition Company decided that it could allow only recovery for royalties and not for profits, 283 Fed. 873, 876, 877. It is well established that an improver can not appropriate the basic patent of another and that the improver without a license is an infringer and may be sued as such. *Cochrane* v. *Deener,* 94 U. S. 780, 787; *Cantrell* v. *Wallick,* 117 U. S. 689, 694; *Yancey* v. *Enright,* 230 Fed. 641, 647; *Reed* v. *Hughes Tool Company,* 261 Fed. 192, 194.

We cannot concur with the district judge in this case or with the Circuit Court of Appeals of the Fifth Circuit in the conclusion that there was no merit in this patent, when its usefulness was demonstrated by ten years' use in such large numbers and by such profitable business. We must consider that the Storrie patent was really an appropriation of the original design of the Thompson patent whether it be, as we think it was, a patentable improvement thereon or the mere equivalent of the casing and hanger.

It is argued that an estoppel works as against the Temco Company by the action of one of the Thompsons, an assignor of its patent, because, in applying for the second patent in what turned out to be the interference proceeding, he had said that the radius link device which was applied for related to an improvement "over" the construction disclosed in the original patent granted to them. If Thompson had said it was an improvement "upon" it would have been satisfactory, but the word "over" is supposed to indicate that he was making an

application for a different patent. This is too fine a turn in language. In attempting to distinguish the new invention which he was seeking to have patented, he had said that the claims of the new patent were "obviously different in mechanical construction and functional results." This is said to estop the plaintiff from claiming that the Storrie radius link, which won in the interference proceeding, is only an improvement on the patent in suit as the basic patent upon which the Storrie patent was an improvement. But it was said in the Thompson application for a second patent in the Patent Office that the invention sought was of the general type disclosed, possessing certain advantages not possessed by the construction of the prior patent, and it was specifically stated therein that the radius link form was an improvement over a construction disclosed in the first Thompson patent, No. 1,072,791.

We have had to depend for knowledge of the contents of the application by Thompson for his second patent on the quotations in the briefs. This record has been so badly prepared and so much has been omitted in the printing that we should really reject the argument by the defendants as to estoppel altogether because the record as printed contains nothing upon which it can be based.

The district court and the Circuit Court of Appeals in this case held that claim No. 3 of the patent in suit was void because inoperative and having no description upon which it could be properly used as a claim. The claim is as follows:

"In automobile construction, wherein coiled springs are used auxiliary to leaf springs for absorbing shock to the road wheels, the combination of upright stanchions with the axle of the ground wheels, said stanchions being attached to the outer ends of said axle, leaf springs extending above the axle and between the stanchions, and supporting the chassis frame, the said stanchions being

adapted to limit the end motion of the leaf springs and thereby prevent side sway of the chassis frame, hangers for the outer ends of said leaf springs, said hangers having a vertical movement and being guided therein by said stanchions, and coiled springs interposed between said leaf spring hangers and said axle of the ground wheels."

The district court in its opinion said: "For want of any statement as to how the leaf spring and helical spring are to be connected to and guided by the stanchions, I think Claim 3 is incomplete and void."

The Circuit Court of Appeals of the Fifth Circuit said of the claim: "Appellee [the petitioner] has filed a cross-appeal and insists that the claim which the district court disallowed is valid. That claim is about as vague as it could be made. As pointed out by the district judge it fails to specify the means by which the leaf and helical springs can be connected to and guided by the stanchion. To sustain a claim as general as this is would be to allow a patent for a 'result and not for the mechanism producing it'."

Reading the claim with the specifications and the drawings, which are both clear (*Howe Machine Co.* v. *National Needle Co.*, 134 U. S. 388, 394) its addition to the combination of coiled springs interposed between the leaf spring hangers having vertical movement and guided by stanchions, comprehends the link as shown in the drawings, or any suitable connection between each leaf spring and its hanger and casing surrounding the coiled spring which is interposed between the leaf spring and the axle and ground wheel. It does not seem to us that the claim is vague; nor do we find nullifying incompleteness in it. *Turrill* v. *Railroad Company*, 1 Wall. 491, 510; *Rubber Company* v. *Goodyear*, 9 Wall. 788, 795; *McClain* v. *Ortmayer*, 141 U. S. 419, 425; Walker on Patents (5th ed.) § 185. Neither did the Court of Appeals of the Sixth Circuit, nor did the district courts of that circuit so find.

Our conclusion requires a reversal of the decree of the Circuit Court of Appeals including its ruling on the cross appeal as to claim No. 3 and a remanding of the case to the district court for further proceedings in accord with this opinion.

Reversed.

RICHMOND SCREW ANCHOR COMPANY *v.* UNITED STATES.

CERTIORARI TO THE COURT OF CLAIMS

No. 99. Argued December 1, 1927.—Decided January 3, 1928.

1. Patent No. 1,228,120, issued May 29, 1917, to Lenke for a cargo beam capable of moving on a horizontal axis so as to present its full strength in the line of stress, thus permitting the use of less metal than was required for the fixed beam of the prior art, and saving expense in installation—*held* valid. P. 339.
2. Where two reasons are given in an opinion for the same decision, neither is *obiter dictum*. P. 340.
3. Rev. Stat. § 3477, forbidding assignments of claims against the United States prior to allowance, liquidation and issuance of a warrant for payment, applied to claims for infringement of a patent. P. 340.
4. The right to recover for past infringement of a patent by a private party is assignable with the patent. P. 344.
5. Under the Act of June 25, 1910, where a patented article was made for the United States by a contractor, unauthorized by the patent owner, and used by the United States, the patent owner had an assignable right of action for the infringement against the contractor; and a claim against the United States for reasonable compensation for the use, assertable in the Court of Claims, but subject to the provisions of Rev. Stats. § 3477 forbidding assignments. Pp. 341, 344, 346.
6. Under the Act of July 1, 1918, which did away with the remedy against the contractor in such cases, and confined the patent owner to a suit against the United States in the Court of Claims for "recovery of his reasonable and entire compensation for such use and manufacture," the claim of the patent owner against the