## A Lawyer's History Lesson

A banquet address presented on January 26 at the New York meeting of the American Physical Society and the American Association of Physics Teachers.

By Henry Allen Moe

WITHIN the month—this month—one of your many eminent members, Dr. Lee DuBridge, published an article which begins like this: "The fact that social and natural scientists seem to have so little to say to each other is one of the tragedies of modern times."

I propose, in a minor way, to try to mitigate what Dr. DuBridge called a tragedy, even while recognising that an after-dinner speech must be neither too solemn nor too long—above all not too long!

Perhaps, I may as well say at the outset, my credentials as a social scientist may not be deemed very good. For I am a lawyer—only a lawyer it is fashionable to say—and during all my years as a member of the Social Science Research Council I never heard anybody take the floor and declare, or even admit, the law to be one of the social sciences. This always surprised me, in my simple-minded way; for I had thought that the essence of science—in one aspect—is to predict results from known data. And from this point of view, the lawyer's law is more often science than any of the other social so-called sciences.

The word "law" and the words "social sciences" are, of course, tricky words; and they are used in many senses, which it would be dull to consider now. But, since I am speaking to physicists—and their ladies—perhaps I had better claim that a lawyer's use of the word "law" has a long priority over your use of the word. Your use of the word and my use of it may have no meaning in common, but I don't think that's so, myself.

However that be, when I speak of a lawyer's use of his data predictively, I do not mean merely that the lawyer can predict accurately the result that you surely will have to pay a \$15 fine from the known data that you had parked your car by a fire-hydrant in New York City and had found a ticket under your windshield wiper.

I mean more than that when I think of the predictive value of a lawyer's data in a lawyer's mind. I have in mind, for a small example, the law that is inherent in the old maxim of the legal learning about criminal libel, that "The greater the truth the greater the libel". Harsh words may well lead to a breach of the peace—fighting in the streets, in other words—and thus the law prosecutes a man who says outrageous things to or about his neighbor, whether the outrageous statements be true or false. Hence, any good lawyer would predict that if a defendant

pleaded that his outrageous statements about his neighbor were true, no surer way of getting convicted of criminal libel could be devised. For, as the old woman said in an English court, "I should not mind being called a fool, were I not one indeed."

But I must be wary of going too far in contending that a lawyer can predict legal results from known data. The old sayings come to mind: the lawyer says to his client, "They can't put you in jail for that"; and the client responds, "But I am in jail for that."

Persiflage aside, what I really intend to do is to give you some data for thinking about the point made by the philosopher, Santayana, that "Those who cannot remember the past are condemned to repeat it."

All lawyers know, and you know too, that, if accused of a crime, you are entitled to demand, and get, a trial by jury; but you cannot know why unless you know what went on in the minds of Englishmen of the later Middle Ages. "So continuous has been our English legal life during the last six centuries, that the law of the later Middle Ages has never been forgotten among us. It has never passed utterly outside the cognizance of our courts and practicing lawyers." (Pollock and Maitland, History of English Law. Introduction, p. xxxiv.)

But even more basic than the question why you are entitled to a trial by jury is, in my mind, the question why you let yourself be tried at all, by any process. You may think this a silly question—to which silly question your obvious answer is that the cops bring you in and you don't have anything to say about it. But it was not always so: in fact, even in our society, it was not so—not very long ago, as time has to be regarded in any view of the history of men.

And clearly, as all of you know, it is not so even today in the relationships of nations to nations. There are no cops to bring a nation in, before a court; and, within very narrow limits, there is, in international affairs, no way to enforce the court's decrees if there were a court to which you could bring the nation in.

It is, indeed, precisely the situation that the shipwrecked sailor explained, with a certain longing: "Captain, if we had some ham we could have ham and eggs for breakfast, if we had some eggs."

I think it fair and evident to say that, at least since the Ten Commandments and the Sermon on the Mount, certainly all western men and practically all men everywhere, have known what's right and what's



Henry Allen Moe is president of the John Simon Guggenheim Memorial Foundation.

wrong in the relationship of men to men. And this goes equally as an accurate statement of the relationship of groups to groups, of tribes to tribes, of nations to nations.

The question is—and there is no more urgent question of these days—what can be done to make the ideals of the Ten Commandments and of the Sermon on the Mount effective among and between nations? Whence, and how and why can we get the ham and get the eggs to create the longed-for breakfast of peace?

Perhaps, as I think, we may learn something on this subject from the legal history of the Middle Ages, which, as Pollock and Maitland noted, has never been wholly forgotten by Anglo-American courts and lawyers.

We do not know, at rock bottom, how what we think of as government by law got started. But we do know with certainty that when men had once gotten a taste of government by law, they wanted more of the same. A bit of order, a recognition that what's mine is mine—my cow, my ox, my land—always has appealed to the feelings of the generality of men as a good thing. To the generality of men, yes; but not to all. The question then was what do you do about those who continue to want to take what is mine and to kill in the process of taking?

This question opens up a large and fascinating chapter in the history of men. The answer seems to be that it had to be made attractive to what we would call malefactors to submit themselves to the judgments of what later became courts. It must have appeared absurd to primitive men—to impute modern thinking to them—to submit their feuds to decisions of courts, just as cowardly and as craven as it apparently seems in the vision of some nations of today.

LEGAL history shows that there were many ways, in primitive law, which were used first to entice and then to compel defendants to submit to the jurisdiction of a court; but I have time to give you only one example—the example of the judgment by battle.

And lest you think I am now using words with some

legerdemain of legal meaning unknown to you, I shall say at once that I mean the same thing by battle that you would mean: the plaintiff and the defendant fought it out with swords and javelins before the court—and the man who won the battle, won the law suit. There was no nonsense about proving the facts.

It is easy to imagine how this would appeal to a malefactor—the tough guy who had stolen or killed. He would enjoy an appeal to physical force. And, in time, another factor came in—particularly after the reception of Christianity. This was a belief that Providence will give victory to the right. The God of Battles would take care of that; and the trial by battle became the *judicium dei*, the judgment of God, par excellence.

How far back in history am I now, when I talk this way? Well—it's hard to say exactly, but certainly in the time of Shakespeare, in 1571 to be exact, trial by battle was a going concern. In that year, it is told in the law reports that the judges and the lawyers adjourned to Tothill fields, near London, where they, with a crowd of four thousand people, assembled to see a trial by battle. (Lowe v. Paramour. Dyer 30.) And Blackstone in his eighteenth century Commentaries on the Laws of England (vol. iii, pp. 333–341) describes trial by battle, at length, as still a part of the law of England.

As Blackstone tells it: "A piece of ground is . . . set out, sixty feet square, and on one side a court is erected for the judges of the court of common pleas, who attend there in their scarlet robes; and also a bar is prepared for the learned sergeants of the law. When the court sits, which ought to be by sunrising, proclamation is made for the parties and their champions; who are introduced by two knights and are dressed in a coat of armour, with red sandals, barelegged from the knee down, bareheaded, with bare arms to the elbow . . . The battle is thus begun and the combatants are bound to fight until the stars appear in the evening."

These are Blackstone's words, not mine. And you will agree that it must have been a very colorful day, from sun up to sun down—a day likely to appeal to a certain type of malefactor. Please note again that there was no nonsense about evidence, no concern with proof of the facts, no jury, no pleas by counsel: the chap who won the battle won the case.

But you will have observed, from Blackstone's account, that certain rules have appeared: the size of the battleground is stipulated; the judges must be there, to enforce the rules, and so must be the lawyers. You also will have observed in Blackstone's account that the parties and their champions must be there.

Well, that was not the end of the whittling down of the defendant's right to insist on trial by battle. Infants, women, and men over sixty were, in time, allowed to decline trial by battle: they might employ champions; and soon the right to employ champions became extended to all able-bodied litigants (W. S.

- INVESTIGATION OF PHYSICAL PHENOMENA
- BASIC SENSORS
- APPLICATIONS OF NEW MATERIALS & TECHNIQUES
- INSTRUMENTATION SYSTEMS

## EXPERIMENTAL PHYSICISTS AND PHYSICAL CHEMISTS

for expansion of a group concerned with the development of basically new techniques and with the solution of advanced instrumentation and

measurement problems.

The nature of the problems solved by this group varies widely, so that the principal qualifications required are an inquiring intelligence and a sound background in physics, physical chemistry, and mathematics. Positions are available for both recent graduates and experienced people capable of accepting primary responsibility for specific programs. Present programs include work in the following areas:

- SPACE PHYSICS
- MEASUREMENT OF GEOPHYSICAL AND METEORO-LOGICAL PARAMETERS IN AND ABOVE THE ATMOS-PHERE
- VISIBLE AND ULTRAVIOLET RADIATION
- NEW TYPES OF ELECTRON MULTIPLIERS
- MASS SPECTROMETRY

Final engineering and packaging are normally carried out by other groups in the organization.

The work is stimulating and satisfying in comfortable and pleasant surroundings in suburban Detroit.

Opportunities for advanced study.

Write or wire A. Capsalis, Research Laboratories Division, The Bendix Corporation Southfield, Michigan

## Research Laboratories Division



An equal opportunity employer

Holdsworth, A History of English Law, vol. i, pp. 308-9). And after a while, churches, landowners, and communities commonly retained champions to do battle for them when the alleged malefactor elected to be tried by battle. By this time, swords and javelins were prohibited and the champions fought only with three-foot wooden staves.

Now you see what really happened, and this is the quintessence of my point—that malefactors were obliged to submit to the jurisidiction of a court; and the court made the rules of the trial by battle as they made the rules of all other forms of trial.

After that had been accomplished, it was a foregone conclusion—although vestiges of the right to trial by battle held on until 1819 in England—that, in time, proof by other forms than by battle would come to dominate legal trial procedure.

And so, in time—but remember it took centuries and fairly recent centuries at that—trial by jury, with its rules of evidence and of procedure and its sense of rational justice, became what we all know it to be now.

And do not forget, please—for I shall return to the point later—that, in the long struggle for civil order, the hardest part was the first, to entice and induce, and then to compel, the alleged malefactor to accept the jurisdiction of a court to decide whether he was a malefactor or not. Thitherto, the malefactor had preferred to decide that for himself! Just as, I hardly need to remind you, some nations still prefer to decide that question for themselves.

In the field of what we would call international relations—although the period is an age before there were nation-states—the history runs much along the same lines.

I have written this out for other occasions and I shall not now take your time to go into it—in the interest of that brevity which is said to be the soul of wit—wit meaning, in this context, intelligence of which I hope I have some, not witticism to which I make no claim.

You may take my word for it that the history of the development of law and order as between the feuding barons and marauding groups ran its course in the Middle Ages along much the same road as the development of law and order as between individuals. The "right"—which is the correct word in the context of the Middle Ages—to the spoils of such interbaronial warfare became the distinctive, recognized privilege of those with enough power to exercise it, for there was no power great enough to restrain. For three long and bloody centuries—the tenth to the thirteenth—in France, this private warfare continued with only the concepts of the Peace of God and the Truce of God to mitigate it, and then only in a limited way.

The difference, the supreme difference between the development of law relating to the individual and the law relating to the feuding barons, was that no way was developed, except by employing greater military **IBM** asks basic questions in computer software

## How much work can computers do?



hese IBM programmers are describing a machine part in TOPROMT, a programming language developed in cooperam with the United Aircraft Corporation.



Following orders generated by an IBM computer from an AUTOPROMT program, this numerically controlled milling machine is shaping a section of a hyperbolic paraboloid.

Ien use words to symbolize ideas. Computers use a astly different kind of language. Present computer gic requires instruction in language so rudimentary tat each year millions of words of programming are evoted to basically repetitive procedures. Unless ays are found to economize on this instruction, the sefulness of computers may be limited by the short-ge of trained personnel to put them to work.

Improgrammers are simplifying communication with omputers. Through careful selection and ordering of ferences to machine structure, they have developed rogramming systems that transfer a large part of the petitive work in programming to the computer self. These systems permit programmers to express neir instructions in language resembling English. They also make different machines "look alike" so nat programmers can state their problems with as ttle difficulty as possible. In addition, IBM programmers are experimenting with systems which use the omputer's own capacity to construct new programming systems, such as assemblers or compilers.

rogramming systems can extend beyond the level of andling machine references automatically to include pplications. AUTOPROMT, IBM's system for numerial control of machine tools, is a codification of tachine shop language and practice which enables a amputer to determine machinists is structions from description of the parts.

generates the sequence of machine tool paths required to produce the part. IBM has also developed information retrieval systems which reduce the burden of indexing, abstracting or disseminating technical information. One experimental system reduces an article to an abstract by statistically determining the most significant sentences in the article.

Eventually, programming systems may grow beyond boundaries of individual disciplines to include general information on the nature of the physical world. Such systems would be supported by information retrieval systems and inference systems capable of seeing logical consequences of retrieved information. They would allow men who direct computers to focus their attention on creative aspects of future problems. By making systems like these possible, IBM programmers and mathematicians are playing a leading role in applying the computer to ever-widening areas of human knowledge.

If you have been searching for an opportunity to make important contributions in software development, manufacturing research, optics, solid state physics, computer systems development or any of the other fields in which IBM scientists and engineers are finding answers to basic questions, please contact us. Write to Manager of Professional Employment, IBM Corp., Department 640Q, 590 Madison Ave., New York 22, New York, IBM is an Equal Opportunity Employer.

force, to get jurisdiction over the predatory barons. The concept of the Peace and Truce of God was a scholar's concept, making the brotherhood of man a logical corollary to the fatherhood of God, and it was good and effective as far as it went. But when the medieval unity of western Christendom disintegrated and when consolidated territorial states appeared as predominant factors, then the concept of the Peace of God went out of the window. And so did the concept of the community of mankind as an effective ideal. In the broadest sense, the history of the era we call Modern is the record of successive attempts to restore that concept as an effective ideal.

And that, in the United Nations, is what we are trying to do today.

I remain an optimist. I remain an optimist because as Mr. Justice Holmes observed, all the rules of modern law "started from a moral basis, from the thought that someone was to blame" (Oliver Wendell Holmes, Jr.: The Common Law, p. 37). And in the United Nations we have a forum in which the moral basis is constantly stated and in which it is pointed out, for all the world to see, who is to blame.

The history of all law is that law is not law until it has become a habit. When it has become a habit, the question of submitting to the jurisdiction of a tribunal—the supreme question—answers itself. Many events of the past decade indicate that the habit of submission to a tribunal in international affairs is growing.

That the habit will continue to grow, there is no doubt. All observers, anthropological and legal, have noted the sentiment of reverence evoked by the mere existence of law in primitive communities. And we may be sure that the sentiment of reverence for law is not less now among all men than it was in primitive communities.

HAVE tried, as you have seen, to bring you a lesson of history-of history from a lawyer's point of view, a legal historian's point of view, if you prefer. In doing so, I have been conscious of two dangers of which Mr. Justice Holmes has written a reminder. "One is that of supposing because an idea seems very familiar and natural to us, that it always has been so. Many things which we take for granted have had to be laboriously fought out or thought out in past times. The other mistake is the opposite one of asking too much of history. We start with man full grown. It may be assumed that the earliest barbarians . . . had a good many of the same feelings and passions as ourselves." (Oliver Wendell Holmes, Jr.: The Common Law, p. 2.) The words are, as said, Mr. Justice Holmes's.

We, who are in the Anglo-American tradition, started on an isolated island site: we were made, from tribes, into one nation by a powerful and skillful and politically wise king, William of Normandy; we were left alone, on our island site, to develop ways to bring malefactors to book and to educate our people in ways of responsible citizenship. Along our thousand year way, we shifted control from king to nobility, from nobility to parliament, and we were able to make this shift because the Renaissance and the Industrial Revolution bred a new force, the educated middle class. Then the settlement of America made a new society, with its ideal that everyone should be as good as the next. And in the United States, very swiftly, freedom under law became a reality; and so did universal education,

Recently there has been added science and technology, tied in with industrial processes, and these have made truly vertiginous the rate of change in some aspects of industrial societies. But they have not made much change in the relationship of men to men, in their degree of competitiveness and cooperativeness—the history of which I have been talking about.

As said, we have had a thousand years to evolve—sometimes smoothly, sometimes not—out of our past. Many of the new nations of our day have no such past. They have taken power without it; indeed, they had no choice but to take power with no long preparation, once enough of their people had been stirred into racial self-consciousness and political awareness. Our long development will not be open to them—not ever.

One may hope, as Ortega y Gasset has written, that "Contrary to general belief, history may advance by jumps, and not always by gradual change. It was the characteristic error of the past century to count upon gradual evolution, and to presume that every whole achievement in history was produced by means of gradual preparation. It was a surprise when facts showed, clearly and undeniably, that in biology and in the spiritual world alike, spontaneous realities could emerge suddenly and in a sense without preparation."

One hopes that Ortega y Gasset is right, and right not only in respect to the biological and spiritual worlds: one hopes so with a hope that is more than hope. But as a lawyer, I see no evidence, in a thousand years of history, for swift change in the relationship of man to man.

And there is another point, which I shall let that greatest of legal historians, F. W. Maitland, state for me. (The Collected Papers of Frederic William Maitland, vol. ii, "The Peace of God and the Land-Peace", pp. 291–292.) Maitland there discusses the means by which scholars created the concept of the Peace of God.

"The cautious particularity of the canons, resolutions, oaths, their provisoes and exceptions and saving clauses . . . are the very essence of the story. Those who strive for peace are in the end successful, because they are content with small successes, and will proceed from particular to particular, placing now the villanus and now the femina nobilis, now the sheep and now the olive tree, now the Saturday and now the Thursday outside the sphere of blood-feud and private war. When they are in a hurry they fail, for they are contending with mighty forces."

We, too, shall fail if we are in a hurry, for we, too, are contending with mighty forces.