

inventors, libraries, universities, governments, and firms, are scattered and either weak, or do not need better documentation so much right now, but what some familiar makeshift can suffice. One can usually find any published fact and some in Ms., by exhaustive hunting in all languages through all the world's big libraries. The periodical indexes are rather well worked out, but burdensomely subdivided by field, language, and year, in hundreds of volumes. Corporations, governments, and other groups build up their own libraries to serve their own purposes more or less well, however unprovided they leave the rest of the searching world. The usually defeated struggles of the Patent Office we have discussed (§ 295). The Office is now embarked on a fine program of devising mechanical and electronic means to search and index chemical and wider literature, and so are the Libraries of Congress and the University of Chicago. The Russians, too, have highly developed documentation;<sup>557</sup> but its general world situation reminds one of the Panama mule path. This 40-mile transisthmian route was one of the world's most important highways, yet for three centuries it remained cobbled with boulders and impassable to any transport better than pack mules, because it was always easier for the time being to continue using it, than to build a road. We obviously need a national or international single index to all recorded knowledge, in which would be collected detail citations or the material itself, or a microfilm of it, and the library locations of all rare texts in the world, with search and translation difficulties minimized by all manner of known devices and others to be invented, for indexing, mechanical searching, making, and reading microfilms and other documents. It should also provide that best cross-referenced of all indexes, human minds, in the form of experts and translators present, or nonresident but cataloged as to their ultimate specialties. A letter or phone call to such a knowledge-center could promptly bring a full and easy answer to almost any question that has ever been answered in the past. It would therefore be an invaluable help to answering *new* questions, as to inventions and all other problems. Such an international research library helping hourly all the world's key inquirers and creators, would also be a great aid to international understanding and good will, through the sociological principles that people become like-minded through acting together to meet common problems, and that they gain respect for their proper teachers through learning who these are, who knows each thing best.

[347] One sort of documentation is a certain great art of interest chiefly to civil government, and therefore dilatory inventionwise under present conditions: the art of *indexing people*. We have, to be sure, made progress, we now take for granted in our newspapers, e.g., that everybody of interest is to be identified by his two or three names, age, sex, and address, while more particular documents add his telephone and often his Social Security number and signature, and sometimes his portrait and fingerprints. Our greatest problem is with our most obscure people, criminals, most resolute not to be indexed and known. We have learned to file and make available many records on

<sup>557</sup> The world's science comes in 30,000 periodicals and a million papers a year, with a backlog of 100,000,000. C. M. Mooers: Info. in a Hurry: *Chem. Engg.* 57:297-9. Nov. 1950. The Russians are publishing each year an index of the world's sci. literature, as big as the *Encyc. Brit.*, with 8,000 journals abstracted by real scientists. *Life*, Dec. 16, 1957, p. 117.