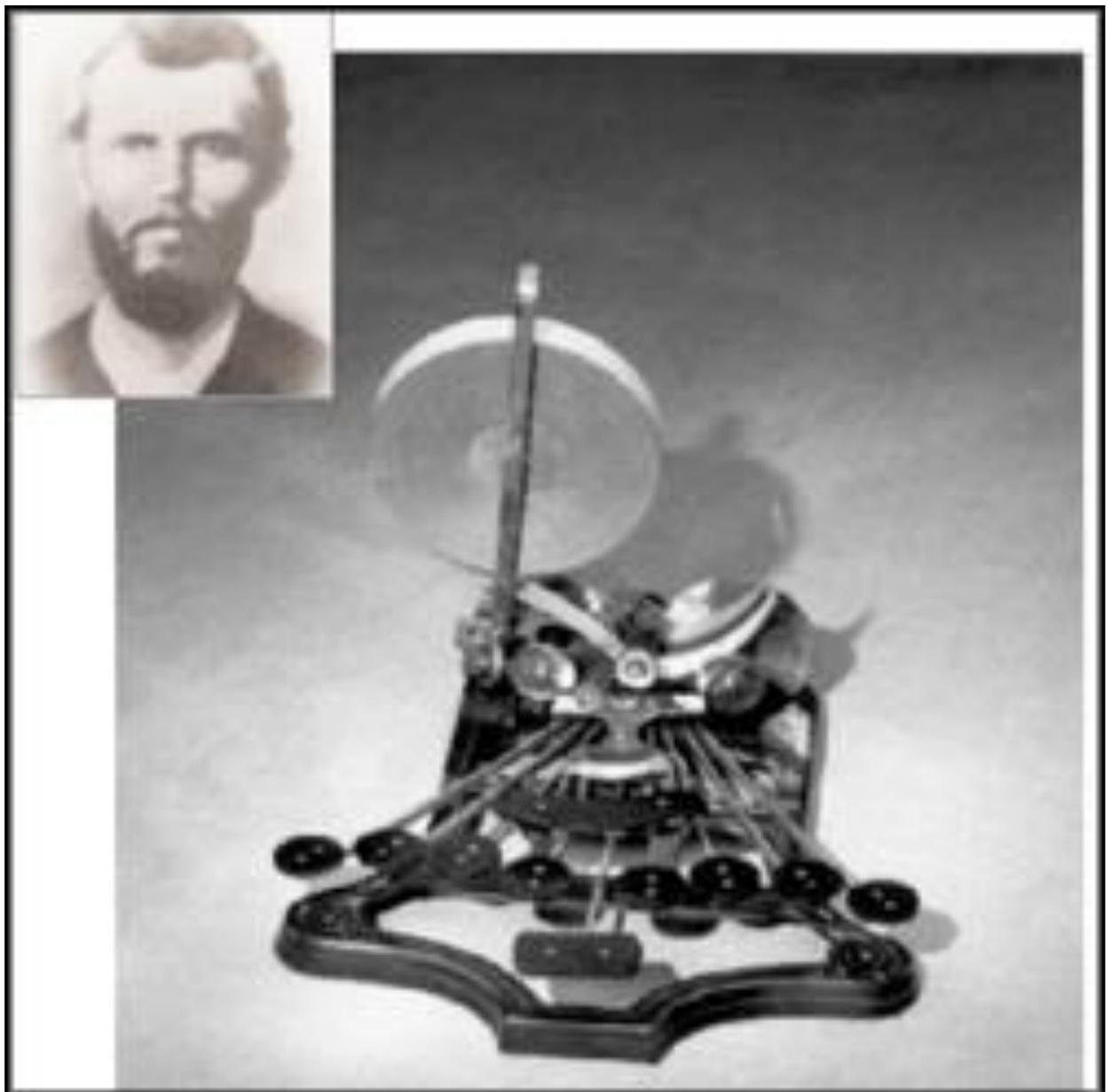


The President, Richard Ward, gave his talk at our AGM on 1 December 2012.

PRESIDENT: Welcome, everybody. Thank you for making it. I just want to say thank you to Mrs Pitman-Miller for also attending, although very briefly.

I am actually going to talk this year about machine shorthand. Some of you on the dictation rota have seen us tapping wildly away on our machines and perhaps you have not been able to understand what is going on, so I thought I would give a brief introduction and a bit of history about the shorthand machine.

The first one was invented way back in 1877 by Miles Bartholomew. Here is a picture that I am going to pass around. It actually resembled dots and dashes, a bit like Morse code.



However, the one that we use today has been in existence from about 1911 invented by Ward Stone Ireland (no relation, unfortunately!).

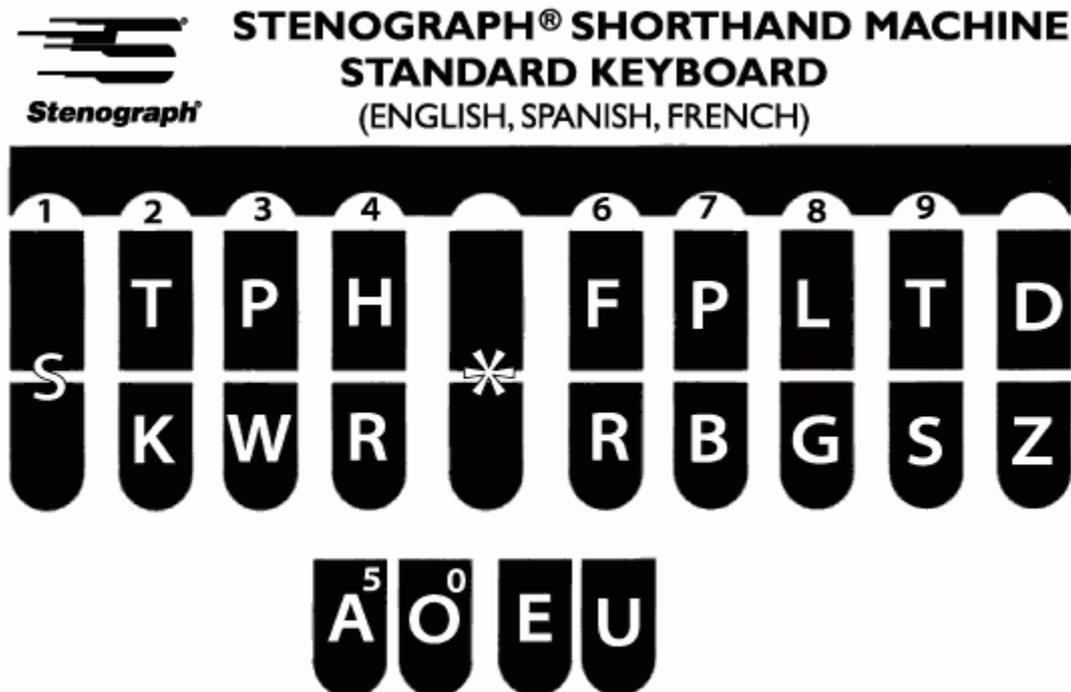
This is a photo of one of the first.



The secret to the way that the speed was increased was that Ward Ireland Stone, who used to be a keyboard operator, as well as a shorthand writer himself, spent, I believe, about nine years in developing the actual machine and the keyboard layout.

You will notice from the keyboard layout which I have presented in front of you and I have also written it on the board here, that not all the keys on the QWERTY keyboard are represented. The idea is that multiple keys represent other letters. Also, by the shape of the keyboard there is little movement. No

extra long reaches, going up as for the P, or awkward movements like down to the Z, as we do on the QWERTY keyboard.



The left hand would normally be placed here, with the small finger on the left hand being placed on the S, the ring finger on the T and K, the middle finger on the P and W and the index, of the left hand, on the H and R.

The left thumb would operate the A and O keys, so, if you just try and place your hand on the keyboard on the one in front of you and just try to hold that position.

On the right hand, the index finger would operate the F and R, the middle finger would operate the P and B, the ring finger would operate L and G and the small finger would operate T and S and also D and Z.

The right thumb would operate E and U.

The asterisk key is usually operated by the right hand index finger, but sometimes the left index finger.

As you can see on my actual machine here, I have what are known as wide keys for T and D, S and Z, also the asterisk key here, in the middle. Therefore, it is quite easy to press all combinations in one go without a finger getting caught in between. Therefore, quite often steno machines will have what is known as wide keys.



Other letter sounds are made up of combinations of keys and it is thought that the keyboard layout takes into account the English language. For example, the left-hand side usually begins consonants in words, whereas the right-hand side is the ending consonants of words. The vowels are usually in the middle of words, but if a word began with a vowel then we use the vowel and then the right-hand side, but if a word begins with a consonant, it begins with the left hand side.

We tend to depress many keys at one time. Therefore, unlike a QWERTY keyboard, where you depress one key at a time, we actually press many keys at a time. Sometimes, in one depression, we usually go by syllables, but can actually go by words and we can even create a phrase or a word grouping in one key depression.

Going back, first of all, to the keyboard layout, it is thought that no other letter usually comes before S if it actually starts a word. There have been one or two exceptions recently such as Tsunami where we have TS, but that is very rare, but based on the sound the T would be silent anyway so we would miss out that T.

If you think about ST, SP, SH, SK, steel, spare, square, etc., then the combinations are usually in the correct order.

Let us have a look at some of the other combinations that are not there on the initial side. Here we have the letter A. B is a combination of P and W. If we look at the keyboard in front of you, you will notice that the keys are very close together and by pressing PW, basically, on the crack in between the two keys, you will actually create the letter B.

C is represented by K and R. If a word begins with the letter C, it usually has a K sound, so something like car or cat, would actually be represented by the letter K(AR) K(AT), but some other words, for example, the word cite, as it to cite something, spelled CITE, you would actually use the combination of KR. I will address more of that in a short while.

D is a combination of T and K, there again, pressing the middle, so that we get the letter D.

F is T and P, the letters next one another. G is a combination of four characters, but they are all placed next to one another. It is D and B, (TKPW). We place the two fingers on the crack and depress all four, TKPW, we produce the letter G. Just look at that on your keyboard in front of you. I will

not go through all of these, but, as you can see, you can actually get the whole of the alphabet.

As with shorthand, there are many theories out there. With pen shorthand you have Pitman New Era, Pitman 2000, T-Line, Gregg, PitmanScript and various others. With machine shorthand we also have different theories. We have Phoenix, StenEd. We have computer-compatible Stenograph theory. We have Roberts/Walsh/Gonzales. There is Realwrite/realtime which I think one of our students also did.

Most of the left side letters are the same throughout all theories, with the exception of Z. In the StenEd theory the Z is represented by S and the asterisk, in the early book, but they changed it later to S and D (STK) now.

In the Phoenix theory we tend to do SWR to represent Z. In Stenograph's computer-compatible theory they did all the left bank STKPWHR. That is just one example of the difference in theories.

On the right-hand side, quite a lot of these vary, but the most common one that is consistent is "ment" so that words like "moment", "attainment", "document", the "ment" is achieved by PLT. I believe that is standard across most theories, but things like "ISH", "SHAL" vary across them. For example, "ISH" which is RB in StenEd, but in Phoenix theory we do GS (which in StenEd is the SHUN sound). You can see that there is some difference in the theories there.

Looking at your keyboard, just using the letters that you see there, can you give me a word that you could use in one keystroke? Let us try to use one letter from the left side, a vowel and a letter from the right-hand side.

PAT: Sat.

PRESIDENT: Good.

MARY: Pat!

PRESIDENT: Yes. Another one?

MARY: Sad.

IRIS: These are single words, aren't they?

MARY: Yes, one syllable.

PRESIDENT: These are all one syllable words.

PAT: Sub.

PAT: Rob.

IRIS: Rat.

PRESIDENT: We have a few words there. You will notice that when I have written them out like that, each letter actually takes a unique place when it is written out. On the older machines we used to have a paper tape coming out. You may have seen them on American films of court cases, the stenographer there typing out the notes and the paper coming out of the machine. The notes come out like this, each letter taking a unique place on the paper and then the transcriber has to translate what that word actually says.

S T K P W H R A O \* E U F R P B L G T S D Z

S		A			T
	P	A			T
S		A			D
S			U	B	
		R O		B	
		R A			T

In the old theories, staying with them for a moment, if we had RED what words could we get from that?

IRIS: Red is obvious.

PRESIDENT: Yes, as in the colour red. What else?

MARY: Read, as it the past tense of read.

IRIS: Reed.

AUDREY: Ready.

IRIS: That is another vowel, isn't it?

PRESIDENT: The same sound. We could also have the other spelling of...

IRIS: Reed.

PRESIDENT: Reed.

IRIS: Yes, reed as from a river bank. Therefore, in the older theories, we could represent many words by the same stroke/spelling. They would take the notes and transcribe them and put them into a transcript with the correct spelling and then sell them.

JUNE: You get the sensing in Pitman's New Era anyway.

IRIS: The same outline, but in different position.

JUNE: For read and reed you have got the same position.

IRIS: Yes.

JUNE: Unless you put in a vowel, or something. You might get a bit mixed up!

PRESIDENT: That is exactly what happens. However, with the advent of computer compatible shorthand, which was in about 1975, theories had to be revised and some of the other theories, such as Stenograph's computer-compatible, StenEd and a few others, had to be modified to allow for computer transcription. Computer transcription basically involves a machine such as mine and usually you attach it to a computer as well. As you can see, I will demonstrate standing up, if I write SAT in one keystroke, the word will actually transcribe correctly. You can come up and have a look.

As well as taking into account different spellings and homonyms, we also have to take into account well-known stenonyms. Let us have a look at how we might represent these three words in modern stenography. The colour red would be RED, to read something, or I have read something, we actually write it as RAED. We actually do a lot of what we call inversing, changing the order of characters around. Then, for the reed we use is known as the long-E which RAOED. This is the difference between short vowel E, long vowel E. There we have the word reed.

On your keyboards in front of you, see if you can write the words, red, read, reed.

(Members tried valiantly to "write" on their paper keyboards!)

There is an example of homonyms, or homophones, sounding the same. A stenonym is when one word could actually be a word on its own, a prefix or a suffix, or part of a prefix and suffix can be part of a word. Therefore, my example to you, if you think about this in Pitman's: How would you represent it? Think about that first. There are going to be three sentences.

Did the car overtake on the inside?

It was a company takeover.

Will you take over the class?

Therefore, you have three different forms of "over". You have it as a prefix, as a suffix and as a word on its own. In stenography we have to show the difference. As a prefix we tend to use an asterisk with the O\*FR, as a word on its own, is OEFR and as a suffix, using the "Y", which is KWROEFR. You have to learn all these different forms and be able to understand context as you are stenoing at speeds of greater than 200 wpm. That is the aim.

IRIS: Your English has to be good.

PAT: That is true with most shorthand. You probably get fed up being asked this, but with cite the C is KR, of course, I am thinking, with the river Cray, would that not be KR?

PRESIDENT: Yes, it would. Cray would be KRAEU.

JUNE: How do you represent words beginning with I such as "in"?

PRESIDENT: The short I is EU, so in would be EU then final N is PB on your keyboard. If it was something like AISLE, as in they walked down the aisle, you would use the long-I and that is represented by all the vowels, AOEU and then L. That would be the word aisle.

PAT: How would you differentiate between I'll walk down the aisle?

PRESIDENT: We have contractions, numbers, all punctuation, all achievable from that keyboard. Therefore, for I'll,

IRIS: This seems worse than T-line!

PRESIDENT; For me, it is KWRAO\*EUL for I'll.

PAT: That is longer than the actual word.

PRESIDENT: But it is one key depression!

PAT: It is a chord.

PRESIDENT: Yes.

PAT: Of course, it is all chords.

PRESIDENT; Just bringing this more into context, supposing that you were the lucky person to have taken part in the OJ Simpson trial, which lasted for, I believe, 360 days. Audrey, you were a famous court reporter, how long would it take you to transcribe that?

AUDREY: Ages!

PRESIDENT: Yes, absolutely ages. According to information that I have retrieved, it would take 8,000 very long days of preparing 70-75 typewritten pages a day by one person.

AUDREY: Surely, they would have a team of four on it?

PRESIDENT: That is what you would have done?

AUDREY: Yes.

PRESIDENT: However, with this, it is instantaneous. That is the big advantage of machine shorthand. In the OJ Simpson trial, the judge had his computer screen, the prosecution counsel had a computer screen, the defence counsel had a computer screen and, as the stenographer was taking the note, they could see instantly what was being said, represented on the screen in English, and highlight any particular point on their computer screen, in case they wanted to re-address anything again. They didn't have to wait for two days, or two weeks, just for that day's transcript.

MARY: One person.

PRESIDENT: One person at a time, yes.

No doubt some of you have seen this already taking place, but possibly not realising it. Do you often queue up in a bank and have a computer screen in front of you with the news on and subtitles?

PRESIDENT: That is being done by a stenographer.

MARY: Some!

IRIS: Some of it is terrible. It is done by speech recognition.

MARY: Yes, some is done, as Iris said, re-voicing by speech recognition which isn't recognising it, but the good stuff is still being done by a stenographer.

IRIS: Yes, you can see the difference.

PAT: I know because I saw something a few years ago on Channel 4 and it was based on a series of paintings by Hogarth, about the Harlot's Progress and it says HARLET for harlot.

IRIS: That is mild.

MARY: Yes, that is mild. At least a deafened person could read it and understand it. They cannot understand anything when they drop words because they haven't got the speed or the accuracy. The software just isn't up to standard.

IRIS: I think they should scrap the speech recognition for now.

MARY: From your lips to God's ear, as they say.

PRESIDENT: If you want to have a quick look, this is just showing you some of the words in the different theories and just comparing. Unfortunately, it has the bias of Phoenix theory because it was on the Phoenix theory website. Phoenix and Realwrite were two of the systems that were introduced after computers came into production and so takes into account realtime writing

whereas, as I have said before, some of the earlier ones had to be adapted to change for computer compatibility.

PAT: Is that where the name Phoenix comes from, rebirth?

MARY: I believe the person who invented comes from Phoenix, Arizona.

PRESIDENT: Yes, Carol Joachim.

PAT: I had too lively an imagination there.

PRESIDENT: I have more or less come to the end of my talk, but the other thing, I noticed on the Stenograph website, they also have, for anybody who is interested in languages, adapted the stenograph keyboard into different languages. I am, therefore, about to hand round examples of foreign keyboards.

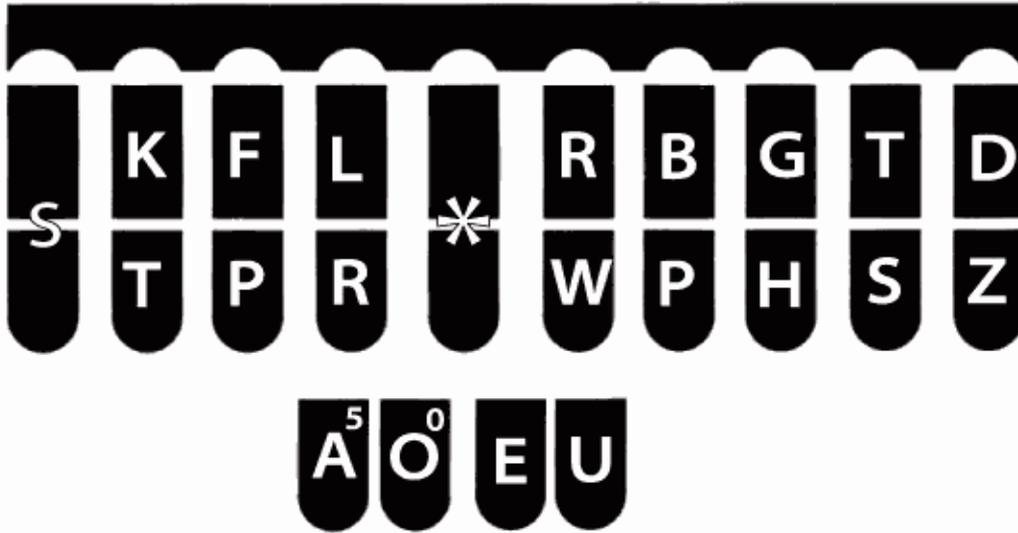
**Greek.**



**Portuguese**



**STENOGRAPH® SHORTHAND MACHINE  
PORTUGUESE KEYBOARD**

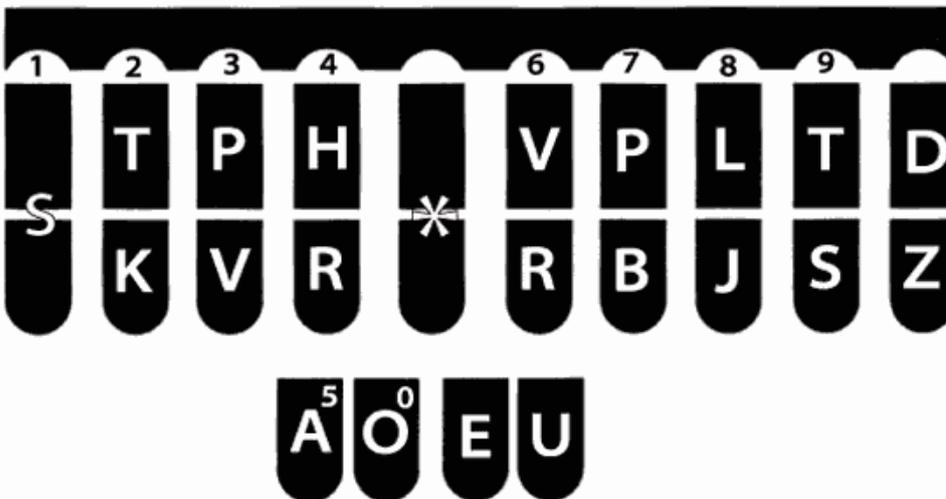


MARY: The keys are laid out in a slightly different order.

PRESIDENT: This one is **Czech**:



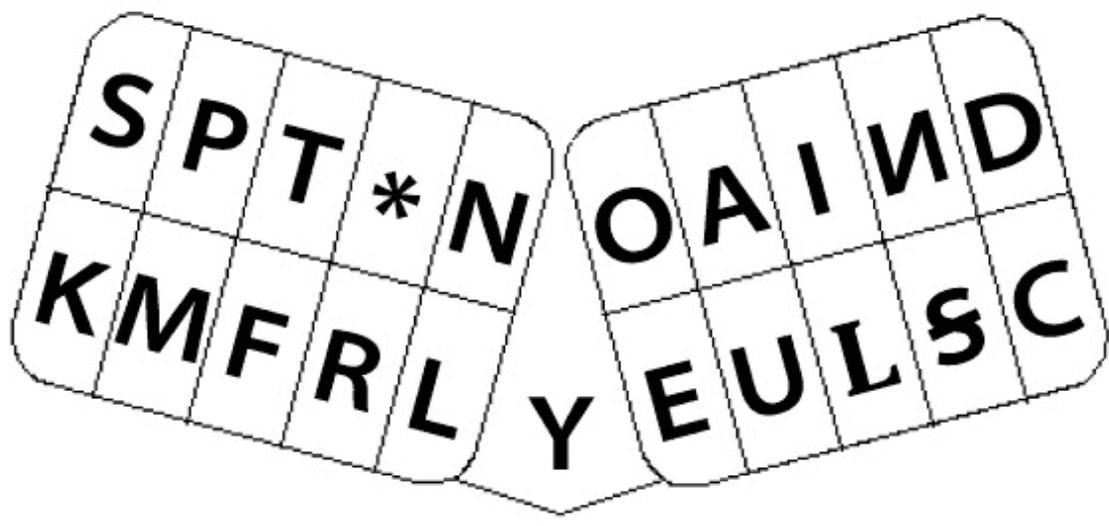
**STENOGRAPH® SHORTHAND MACHINE  
CZECH KEYBOARD**



Then **Continental**:



**STENOGRAPH® SHORTHAND MACHINE  
CONTINENTAL KEYBOARD**



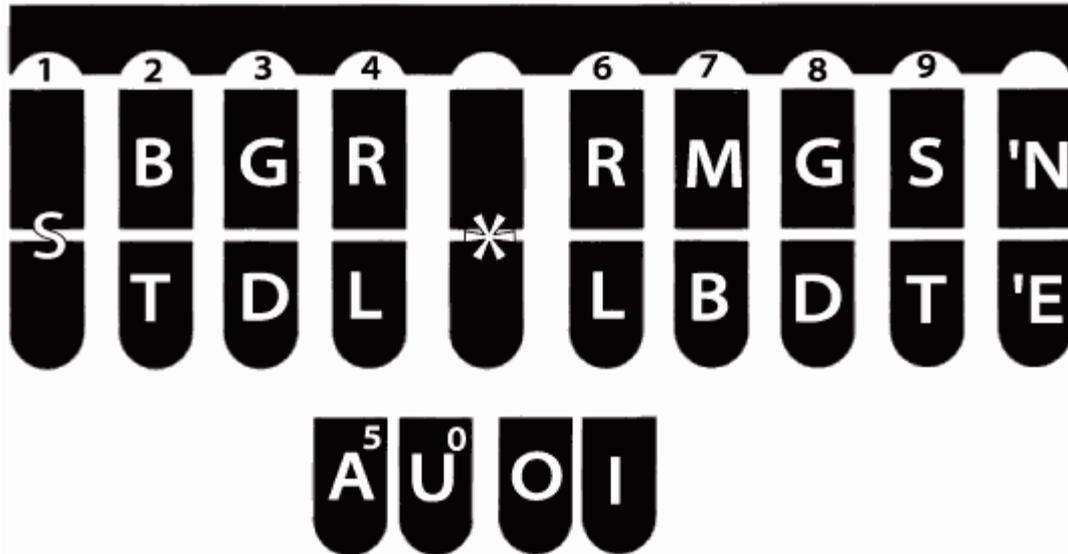
PAT: That looks very like a Palantype.

PRESIDENT: There are different ones.

German:



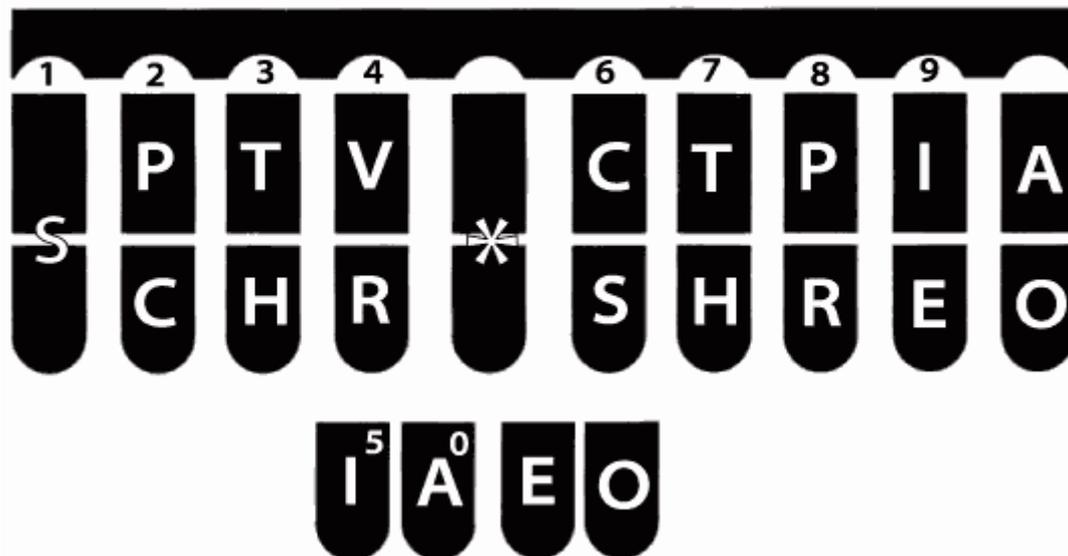
**STENOGRAPH® SHORTHAND MACHINE  
GERMAN KEYBOARD**



Italian:



**STENOGRAPH® SHORTHAND MACHINE  
ITALIAN KEYBOARD**



Japanese:



MARY: Again, the phonetic sound, rather than the characters.

PRESIDENT:

Russian:



If anyone would like to have a try-out on my machine, other than that I would just to wish everybody a Merry Christmas, Good Health and a Happy New Year, that concludes my talk.

PAT: Very interesting.

MARY: Can we thank Richard for his talk.

(Applause)

## Bibliography

<http://www.stenograph.com/marcom/HistoryofWriters>  
<http://www.stenograph.com/pages.aspx?docid=228&id=>  
(International Keyboards)

Computer-Compatible Stenograph Theory (Stenograph  
L.L.C., 1996)

<http://books.google.co.uk/books?id=YVgRmMJSu8lC&pg=PA90&lpg=PA90&dq=machine+shorthand+OJ+Simpson&source=bl&ots=YlcH7fsmAn&sig=jB27Q34u4SGSewAlZIdS6fb4wx8&hl=en&sa=X&ei=m-G5UMjVE4OH0AWin4CIDQ&ved=0CFIQ6AEwBw#v=onepage&q=machine%20shorthand%20OJ%20Simpson&f=false>

<http://www.phoenixtheory.com/>

<http://www.stenograph.com/>

<http://www.stened.com/>